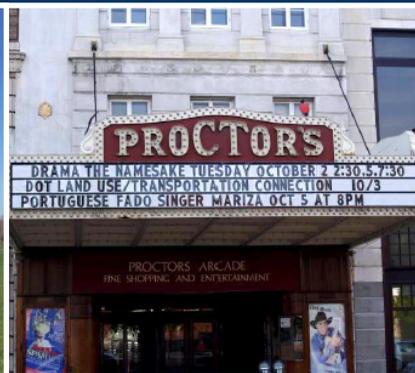

NEW YORK RISING COMMUNITY RECONSTRUCTION PROGRAM CONCEPTUAL PLAN

City of Schenectady, Town of Rotterdam

October 2013



This document was developed by the City of Schenectady and the Town of Rotterdam Planning Committee as part of the NY Rising Community Reconstruction (NYRCR) Program within the Governor's Office of Storm Recovery. The NYRCR Program is supported by NYS Homes and Community Renewal, NYS Department of State, and NYS Department of Transportation. Assistance was provided by the following consulting firms: Ecology and Environment, Inc. and River Street Planning & Development

FOREWORD

The New York Rising Community Reconstruction (NYRCR) program was established by Governor Andrew M. Cuomo to provide additional rebuilding and revitalization assistance to communities damaged by Superstorm Sandy, Hurricane Irene, and Tropical Storm Lee. This program empowers communities to prepare locally-driven recovery plans to identify innovative reconstruction projects and other needed actions to allow each community not only to survive, but also to thrive in an era when natural risks will become increasingly common.

The NYRCR program is managed by the Governor's Office of Storm Recovery in conjunction with New York State Homes and Community Renewal and the Department of State. The NYRCR program consists of both planning and implementation phases, to assist communities in making informed recovery decisions.

The development of this conceptual plan is the result of innumerable hours of effort from volunteer planning committee members, members of the public, municipal employees, elected officials, state employees, and planning consultants. Across the state, over 102 communities are working together to build back better and stronger.

This conceptual plan is a snapshot of the current thoughts of the community and planning committee. The plans will evolve as communities analyze the risk to their assets, their needs and opportunities, the potential costs and benefits of projects and actions, and their priorities. As projects are more fully defined, the potential impact on neighboring municipalities or the region as a whole may lead to further modifications.

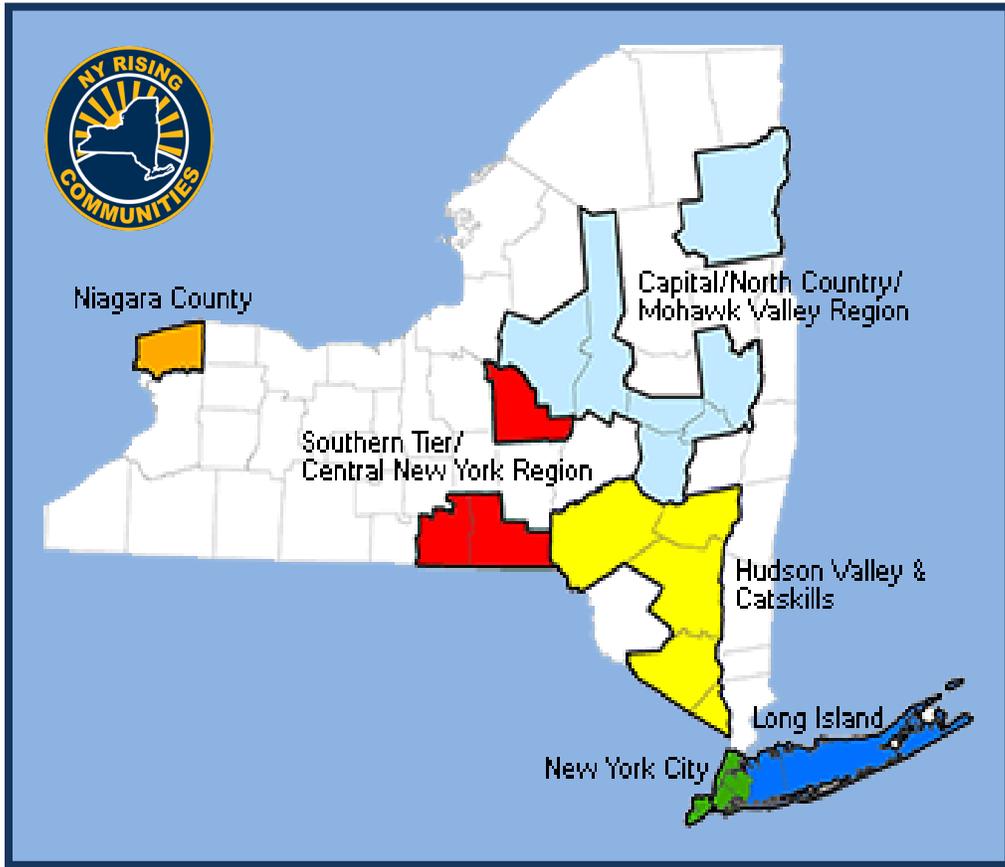
In the months ahead, communities will develop ways to implement additional strategies for economic revitalization, human services, housing, infrastructure, natural and cultural resources, and the community's capacity to implement changes.

Implementation of the proposed projects and actions found in this conceptual plan is subject to applicable federal, state, and local laws and regulations. Inclusion of a project or action in this conceptual plan does not guarantee that a particular project or action will be eligible for Community Development Block Grant – Disaster Recovery (CDBG-DR) funding. Proposed projects or actions may be eligible for other state or federal funding, or could be accomplished with municipal, nonprofit or private investment.

Each NYRCR Community will continue to engage the public as they develop a final plan for community reconstruction. Events will be held to receive feedback on the conceptual plan, to provide an understanding of risk to assets, and to gather additional ideas for strategies, projects and actions.

October 31, 2013

New York Rising Communities





The Daily Gazette



The Daily Gazette



The Daily Gazette

EXECUTIVE SUMMARY

October 2013



The City of Schenectady and the Town of Rotterdam will be resilient: they will anticipate flood risks, limit impacts to property and infrastructure when flooding is unavoidable, and respond efficiently and recover quickly, in a manner that protects traditional community neighborhoods, quality of life, and takes advantage of waterfront opportunities.

—Community Vision Statement

Impacts of Recent Flooding

Schenectady (population 66,000) has a heritage of industry tied to its location along the Mohawk River, Erie Canal, and major roadways. It is the home of General Electric (GE) and the former home of American Locomotive Company (ALCO). In recent years, GE has scaled back operations and ALCO is bankrupt, leading to tough financial times and a loss of population. The Town of Rotterdam (population 29,000) includes rural housing and small villages in the hills west of Albany and Schenectady, and some heavy industry; the hamlets of Rotterdam Junction and Pattersonville (combined population 1,000), are within the floodplain of the Mohawk River.

On August 29, 2011, Tropical Storm Irene caused extensive damage throughout Schenectady County. A week later, Tropical Storm Lee hit the same area, compounding the damage already caused by Irene. As the floodwaters receded, hundreds of home and business owners were faced with the need to rebuild and/or renovate. Rotterdam Junction was severely impacted by the flood waters from Tropical Storms Irene and Lee. The primary flooding inundated eighty-four homes; 52 were flooded on the first floor and 32 were flooded up to the second floor. Flood waters reached 18 feet high on Scrafford Lane, Isabella Street, Lock Street, Iroquois Street and Erie Street (Figures 1, 2). Flood waters remained in these neighborhoods for up to six days following the storms. Residents who had not evacuated found themselves trapped in the Hamlet because Route 55 was flooded, the Route 103 bridge was damaged while its roadway and embankment was washed away. This effectively turned Rotterdam Junction into an island surrounded by debris-laden flood waters, making it that much more dangerous to attempt to leave. Areas of the City of Schenectady were also inundated during Tropical Storms Irene and Lee. Key damage recorded:

- Schenectady's wastewater system, including the North Ferry Street Pump Station, built in 1913, and the South Ferry Street pump station were inundated.
- Low-lying areas of the city's historical neighborhood, the Stockade, were flooded.
- The East Front Street neighborhood was flooded.
- Riverside Park and Gateway Landing- Rotary Park were flooded.
- Schenectady County Community College (SCCC) sustained an estimated \$1 million worth of flooding damage. Flood waters inundated the main parking lot, the first floor of Elston Hall, and up to the windows within the Begley building.
- Commercial buildings along Van Guysling Avenue were flooded.
- The Department of Social Services (DSS) and a National Grid site were flooded.
- A sewer at Nott Street and East Front Street overflowed to the street.

Rebuilding Better

Despite these impacts, the communities are committed to rebuilding. They recognize that flooding of this magnitude can happen again, so rebuilding plans all must include flood mitigation to avoid the devastating effects of future flooding.

The communities have identified some projects that meet the goals of the Vision Statement. The list for each community, shown on the right, is preliminary, but the projects provide a good place to start the discussion with the communities.



Figure 1. Historical flooding of the North Ferry Street Pump Station, built in 1913.

A total of 88 insurance claims were paid amounting to \$610,000 in the **City of Schenectady** in the 30 years (1978-2009), prior to the storms. From 2009 to 2012, just two years before and one year after the storms, a total of 55 insurance claims were paid amounting to **\$2.5 million**.

A total of 19 insurance claims were paid amounting to \$184,000 in the **Town of Rotterdam** in the 30 years (1978-2009), prior to the storms. From 2009 to 2012, a total of 44 insurance claims were paid amounting to **\$1.8 million**.



Figure 2. Flooded roads isolated Rotterdam Junction (photo credit: Long Term Community Recovery Plan, Rotterdam Junction, 2013)



Figure 3. Flooding of downtown Schenectady (photo courtesy Schenectady County Planning Department)

City of Schenectady Preliminary Priority Projects

Install an emergency generator at Schenectady County Community College (SCCC) for critical services.	Install generator back-up at Rotterdam wellhead and protection from flooding through the use of berms.
Elevate or protect the parking garage at SCCC.	Complete a Canalway Study for drainage management and access.
Conduct a River Flow Management study with the Canal Corporation to better manage high water.	Expand Riverside Park and create new public access on the River adjacent to East Front Street neighborhood in Schenectady.
Implement the City's Gateway Implementation Plan to enhance a key City gateway, improve connections between SCCC, downtown and the Stockade Neighborhood.	Develop additional passive and active recreational amenities on the River in the area of East Front Street and in connection with the Hudson Mohawk Bike Hike Trail.
Daylight/restore Cowhorn Creek, Hans Groot Kill (College Creek), and other tributaries.	Overhaul and install new drainage system on SCCC Washington Avenue campus to alleviate backups.
Complete North Ferry Street Pump Station flood mitigation.	Provide flood protection for the National Grid substation.
Identify a flood mitigation strategy for the Stockade Neighborhood and East Front Street absent the ability to move all structures out of the flood prone area.	Create a greenbelt loop and interconnecting greenspace along the Mohawk River incorporating Glenville/Scotia and Schenectady via the Riverside Park and ALCO site.
Identify a plan for berm protection of the City Waste Water Treatment Plant on Anthony Street.	

Town of Rotterdam Preliminary Priority Projects

Install a generator at the Rotterdam Junction Fire District #1 Station.	Install backup generators at each of five sanitary lift stations.
Replace two culverts at the railroad crossing at Scrafford with appropriate capacities and elevations, as well as replace the culvert at Mabie Lane to improve drainage to the east.	A streetscape project should address poor sidewalk conditions, consolidation and elimination of curb cuts, street trees, pedestrian benches, and decorative lighting along the Mohawk River in Rotterdam.
Remove the sewage pumps on Lock Street and replace them with a gravity drainage line that runs from Lock Street to Scrafford Lane to help eliminate flooding on Lock Street.	Perform stormwater upgrades to pipes, culverts, and catch basins along Scrafford Lane and along the Old Erie Canal. Determine ownership and remove debris to open drainage.
Install an automatic transfer switch at the Rotterdam Junction - Town of Rotterdam District #3 well head facility to automatically start the generators in the event of a power outage.	Drill a new well at the Rotterdam Water District #5 facility located on River Road. Include a flood containment berm around the proposed new well located in the flood plain along the Mohawk River.
Remove sediment and debris to establish a narrow meandering channel along the Old Erie Canal.	Purchase six high capacity diesel pumps, two of which will be trailer mounted for use by DPW to deploy to critical affected areas.
Construct a tunnel under the railroad to allow bike trail traffic at Scrafford Lane. A drainage component would also be engineered into this tunnel project.	Work with Schenectady County to refine and improve the existing emergency response and evacuation plan to address lessons learned during the Tropical Storms Irene and Lee.
Coordinate construction with the NYS Canal Corporation to provide trail heads and access points to the Mohawk River.	Provide training to all code enforcement personnel and other appropriate Town personnel.
Provide a berm around the District #1 Rotterdam Junction Well Facility and provide sump pumps to remove precipitation and/or water that leaks onto the site.	Install a generator at the Rotterdam Senior Center to provide electricity in the event of a power outage. This facility was used as an emergency shelter and meal site during the previous flood emergency.
Establish redundant evacuation routes. Investigate raising the grade on Route 55 at the southeasterly end of Rotterdam Junction where flooding occurs (near the intersection of the bike path).	Purchase homes located in Rotterdam Junction from homeowners not rebuilding or returning to their homes. Purchase demolished or sold homes for reoccupation and tax rolls.
Purchase the Bobby Young's Garage property located in Rotterdam Junction. This would provide protection from possible contamination for the two Rotterdam Junction well heads that are located directly behind the Young property.	Investigate re-installing connection valves between the Town of Rotterdam main water lines and the City of Schenectady main water lines to provide for interconnection of water between the two municipalities if one of these municipalities require water supply during an emergency.
Encourage tourism and highlight the Town's history and heritage by cleaning up and revitalizing the old Erie Canal Lock #25. An interpretative overlook should be created to provide for scenic views and a historical perspective of the lock. This could be incorporated into our high priority list.	Establish a connection between the Rotterdam Junction District #3 wells with the wells at Schenectady International (SI) Group facility. Establish a connection between the Rotterdam District #5 wells on Rice Road and the SI Group and the District #3 well facility.



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Acronyms, Abbreviations, and Key Terms

ALCO	American Locomotive Company
DPW	Department of Public Works (Town of Rotterdam)
DSS	Department of Social Services (Schenectady County)
E & E	Ecology and Environment, Inc.
EMS	Emergency Medical Services
FEMA	Federal Emergency Management Authority
FIS	Flood Insurance Study (FEMA)
GE	General Electric Company
HEC-RAS	Hydrologic Engineering Centers River Analysis System
LTCRP	Draft Long-Term Community Recovery Plan (Rotterdam)
NFIP	National Flood Insurance Program (FEMA)
NYRCR	New York Rising Community Reconstruction
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOS	New York State Department of State
NYSHCR	New York State Homes and Community Renewal
Planning Firm	Consulting Firm Assigned to Each Community
SCCC	Schenectady County Community College
Working Group	NYSDOS Uniform Approach Working Groups
Work Plan	NYRCR Work Plan

1.0 Overview

1.1 NYRCR Program Overview

Governor Cuomo launched the New York Rising Community Reconstruction (NYRCR) Program, as a means for New York State (NYS) to help give a new beginning to local communities which were heavily impacted by Hurricane Irene and Tropical Storm Lee, and Hurricane Sandy. The intent of the program is for each community to **build back better** and prepare against economically and socially devastating damage in the future. This will mean capitalizing on community-driven plans that weigh current damage and future threats to critical community assets while planning for a sustainable, more vibrant economic future. Through a successful ground-up planning effort, interdependent and individual communities will be positioned to obtain funding to implement their Plan, and collectively prepare for a more resilient future.

NYRCR Plans: In line with the National Disaster Recovery Framework, the plans will consider the needs, risks, and opportunities related to the following six recovery support functions:

- Community Planning and Capacity Building,
- Economic Development,
- Health and Social Services,
- Housing,
- Infrastructure, and
- Natural and Cultural Resources.

This is a major objective of the NYRCR program – to support communities willing to become more resilient to future storms. To achieve this means learning to better understand the associated risks and then learning how to manage them. Through this program, the residents of the Town of Rotterdam and the City of Schenectady are being encouraged to undertake their own proactive evaluation of what constitutes risk – namely hazard, exposure, and vulnerability. This will allow them to consider and define the future they want for their communities

and develop effective, pro-active reconstruction strategies. These strategies will guide future project and investment decisions, redirect land use, and gradually transition at-risk assets from high risk conditions to an acceptable lower level of risk. Associated benefits will include increased economic security and potentially lower flood insurance premiums.

1.2 Summary of Storm Impacts

The major source of flooding for the Town of Rotterdam and City of Schenectady is the Mohawk River and its smaller creeks and tributaries. Historically, flooding has occurred from excessive runoff from heavy rains, as was the case for the storm events discussed here, but flooding has also occurred from ice jams on the rivers and from rain added to heavy snowmelt.

On August 29, 2011, Hurricane Irene caused extensive damage throughout **Schenectady County**. A week later, Tropical Storm Lee hit the same area, exacerbating the damage already caused by Irene. As the floodwaters receded, hundreds of home and business owners were faced with the need to rebuild and/or renovate. While Federal Emergency Management Authority (FEMA) funded some of the recovery, some families and businesses were not able to cover the actual costs of recovery. For example, if a home located in the flood zone sustained damage in excess of 50% of its pre-flood market value, the home had to be rebuilt in compliance with FEMA Floodplain Regulations. In most cases, this would mean raising the ground level of the home by eight (8) feet, which was not affordable for many of those impacted. As an alternative, eligible homes could be bought out by FEMA, with the requirement that the

land turned into green space. The result was that many Schenectady County residences and businesses found themselves in critical need of assistance. The Flood Recovery Coalition emerged with its partners (American Red Cross, Better Neighborhoods, Mohawk Opportunities, Northeast Parent and Child Society, Parsons Child and Family Center, Samaritan Counseling Center and the New York State Chapter of the National Association of Social Workers) to work on 72 homes throughout Schenectady County. Rebuilding and repairs began in December 2011, to be completed in January of 2013, 13 months later.



Rotterdam Junction after Hurricane Irene/Tropical Storm Lee (Photo credit: The Daily Gazette)

Rotterdam Junction, a hamlet in the Town of Rotterdam, was severely impacted by the flood waters from Hurricane Irene and Tropical Storm Lee. As a result, 62 homes were inundated; 52 were flooded on the first floor and 10 were flooded up to the second floor. Flood waters reached 4 to 12 feet high on Scrafford Lane, Isabella Street, Lock Street, Iroquois Street and Erie Street. Flood waters remained in these neighborhoods for up to six days following the storms. Residents who had not evacuated found themselves trapped in the Hamlet because Route 5S was flooded and the Route 103 bridge was damaged. This effectively turned Rotterdam Junction into an island surrounded by debris-laden flood waters, making it that much more dangerous to attempt to leave. This flooding caused financial losses that impacted homeowners as well as businesses. Some homeowners could not rebuild. Despite having lived several generations in the area, they had to relocate and start their lives over, elsewhere.

Areas of the **City of Schenectady** were also inundated during Hurricane Irene and Tropical Storm Lee. Downstream effects from Hurricane Irene came early Monday morning, the day after the storm hit. Most of the flooding damage from Tropical Storm Lee occurred in a historic neighborhood known as the Stockade. Key damage recorded included:



Stockade neighborhood after Hurricane Irene/Tropical Storm Lee (Photo credit: J. Kalohn)

- Schenectady’s wastewater system, including the North Ferry Street Pump Station, built in 1913, and the South Ferry Street pump station. The control and electrical systems were inundated, as well as the emergency generator North Ferry Street Pump Station.
- The city’s historical neighborhood, the Stockade. Ingersoll, North, North Ferry, Governor’s Lane and Washington Avenue are cross streets that descend towards Riverside Park, which is located at the edge of the Mohawk River. Historically, the houses lowest in elevation, located at the bottom of the dead end cross streets, have been damaged during extreme flooding events.

- East Front Street neighborhood: as described by the U.S. Geological Survey¹, the peak flooding reported north of Front Street was as follows: The North Ferry Street gage reads about 230 feet. Water floods the former Alco plant area on Erie Boulevard extension; Edison Avenue and Van Guysling Avenue; Broadway between Edison Avenue and Clinton Street; and River Street. National grid substation at River Street requires protection. In Scotia, Schonowee, Washington and Livingston Avenues are flooded and water is in homes throughout the area. Collins Park is flooded.
- Riverside Park. The park was flooded and the swings were under water
- Gateway Landing- Rotary Park was flooded
- Schenectady County Community College (SCCC). The SCCC sustained an estimated \$1 million worth of flooding damage to the main parking lot, the first floor of one portion of Elston Hall (three feet of water), and water flooded up to the windows within the Begley building.
- Van Guysling Avenue- roofing company and other commercial facilities were flooded.
- Broadway area of the DSS and National Grid site was flooded.
- The west side of the intersection of Nott Street and East Front Street. The sewer in this area overflows during short duration high volume storms and ice jams. A significant amount of water comes up through the manhole.



Schenectady County Community College after Hurricane Irene/Tropical Storm Lee (Photo credit: Albany Times Union)

Additionally, the May 22, 2013 storm caused major sewage flooding at the intersection of Nott Street and East Front Street. The storm also caused flooding on Broadway at the DSS building and National Grid Site as well as west of I-890.

The City of Schenectady applied for a \$738,830.23 loan from the Hurricane Emergency Loan Program (HELP), a \$25 million loan fund created by Governor Cuomo that provides up to \$1 million in interest-free loans to municipalities in need of immediate repairs to drinking and wastewater facilities. The City of Schenectady received funding in March 2013. The money was used to help defray the cost of work completed on the wastewater treatment plant, Edison Avenue sewer line, and the North Ferry Street Pump Station.

*A total of 88 insurance claims were paid amounting to \$610,000 in the **City of Schenectady** in the 30 years (1978-2009), prior to the storms. From 2009 to 2012, just two years before and one year after the storms, a total of 55 insurance claims were paid amounting to \$2.5 million.*

*A total of 19 insurance claims were paid amounting to \$184,000 in the **Town of Rotterdam** in the 30 years (1978-2009), prior to the storms. From 2009 to 2012, a total of 44 insurance claims were paid amounting to \$1.8 million.*

¹ As reported by the National Weather Service Advanced Hydrologic Prediction Service, accessed 10/14/13 at <http://water.weather.gov/ahps2/hydrograph.php?wfo=aly&gage=schn6>

Table 1-1 shows how flood-related damage in the past three years has far exceeded flood-related damage from 1978 to 2009. The table summarizes the significant difference in insurance claims paid before and after Hurricane Irene and Tropical Storm Lee in the Town of Rotterdam and City of Schenectady

Table 1-1 Insurance claims paid before and after Hurricane Irene and Tropical Storm Lee

County/City/Town	1978-2009		2009-2012	
	Number of Claims	Amount Paid	Number of Claims	Amount Paid (millions)
City of Schenectady	88	\$610,000	53	\$2.5
Town of Rotterdam	19	\$184,000	44	\$1.8

Source: FEMA National Flood Insurance Program (NFIP)

1.3 Community Overview: History, Geography and Land Use

The study area (Figure 1) is located in Schenectady County in the Capital District region of upstate New York. It includes portions of the Town of Rotterdam along the Mohawk River, which is coterminous with the State Canal System, including the hamlets of Rotterdam Junction and Pattersonville to the west and the City of Schenectady along the entirety of its waterfront. In addition, a portion of the Village of Scotia and Town of Glenville across the River are included in the study area to the extent that the wellheads in those communities are a critical water source for Schenectady and Rotterdam should they be impacted by flooding in the future.

Similar to many northeastern communities, the Town of Rotterdam, founded in 1820, grew historically as a result of its easy access to waterways and trade routes, and later as a manufacturing center. Rotterdam was originally the Third Ward of the City of Schenectady until the early 19th century. The municipality experienced a development boom following the opening of the Erie Canal in the 1820s due to its location on the Mohawk River. Today, the Town of Rotterdam and the Schenectady County area are considered to be industrial with a traditionally heavy concentration of manufacturing. In the 1820s, employment revolved around the Erie Canal. The Town of Rotterdam residents performed maintenance and repairs, operated shops, hotels, and other businesses along the canal, and worked at the three canal locks, and on the boats and docks. Additionally, farmers used the canal to transport goods. The town grew in 1825 to include two churches, school houses, four gristmills, four sawmills, three textile mills, a paper mill, and other businesses.

The hamlet of Rotterdam Junction was created as a result of the construction of the railroad through the Town of Rotterdam and along the canal system. Hamlets, including Rotterdam Junction, provided services such as lodging to workers constructing the railroad and working on the canal. During the 20th century, Rotterdam was known as the “Good Place to Live” due to the transportation boom. The Rotterdam Junction economy began to suffer following World War II because the canal was not used and the railroad hubs were moved to Watervliet.

Parts of Rotterdam Junction are located at one of the lowest elevations in the County due to their location along the Mohawk River making it difficult for new development. Economic development in the study area is constrained by lack of public water and sewer, as well as the presence of the Great Flats Aquifer. This underground water source supplies 50% of the drinking water consumed by the area overlying the aquifer. These areas have no alternative drinking water supply.

Schenectady was first settled in 1661 when the area was part of the Dutch colony of New Netherland. It was chartered as a city in 1798. The city was once known as "The City that Lights and Hauls the World"-- a dual reference to two prominent businesses located in the city, the Edison Electric Company (now

known as General Electric), and the American Locomotive Company (ALCO). GE has retained its administrative core in Schenectady, but many of the manufacturing jobs have relocated out of the northeast. ALCO's operations slowly declined as the company went through a series of acquisitions and restructuring in the late 1960s.² Redevelopment of the ALCO site is a priority of both the City and the County. In the early 21st century, the city is experiencing difficult financial times, as are many upstate New York cities. The profound loss of employment opportunities has led to Schenectady's population decline by nearly a third since 1950.³

The expansion of GE between 1890 and 1920 shaped the physical character of the city. More people worked at GE than had lived in the entire city before the company was created. GE's main plant developed into a "mile-square city-within-a-city." This demand increased housing development in adjacent neighborhoods as well as local businesses such as groceries, bakeries, butcher shops, taverns, and tailor's shops.⁴

During World War I and II, factories throughout the city were used to build heavy military equipment and trains. Following World War II, the economy suffered due to railroad decline, causing ALCO to cease operations in 1970. The City of Schenectady has transitioned from a company town to a city with a diverse economy, enhanced by the existence and/or development of Union College, the Stockade District (New York State's first historical neighborhood), the Proctor's Block, including Proctor's Theater, Little Italy, North Jay Street and other historic and heritage locations, and brownfield redevelopments such as College Park.⁵

1.4 Geographic Scope of the Plan

Figure 1-1 shows the geographic scope of this plan for the City of Schenectady and the Town of Rotterdam. The geographic scope was initially defined using the 2013 FEMA mapping and then refined and finalized based on input from the Committee Co-Chairs, Committee Members and the public during the first two planning committee meetings and the first public outreach meeting. Members of the public identified the extent of flooding from Hurricane Irene and Tropical Storm Lee by marking the waterline on a project area map at the first public outreach meeting.

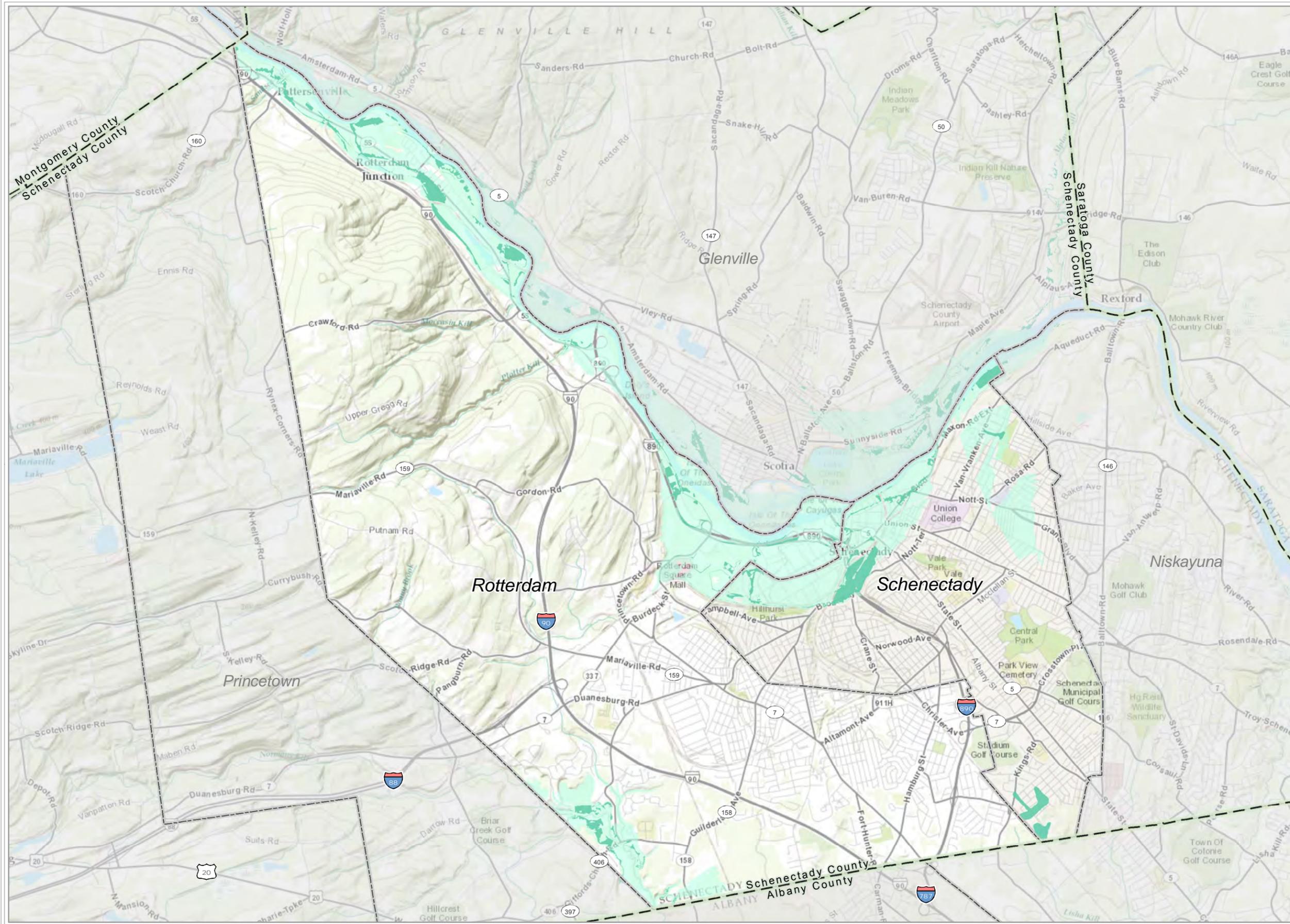
The study area is defined by a 500-year flood plain with a 10-foot elevation buffer. The study area extends into the Town of Glenville and Scotia Village. Committee Members decided at the second committee meeting that the well field located along the Mohawk River in the Town of Glenville is a critical asset to both the Town of Rotterdam and the City of Schenectady. The well field area of the Town of Glenville could potentially provide the Town of Rotterdam and City of Schenectady with water in the event of an emergency. To date, this area of Glenville has not flooded.

² City of Schenectady, New York Official Website, <http://cityofscheneectady.com/history/html>

³ Ibid.

⁴ Ibid.

⁵ Ibid.



Project Area City of Schenectady and Town of Rotterdam

October 2013

-  500-Year Flood Zone
-  Study Area – 10-Foot Buffer of 500-Year Flood Zone
-  Municipal Boundary



ESRI - World Topo Imagery



1.5 Critical Community Issues

Based on discussions with community leaders and background research, and early results from the Needs and Opportunities Assessment, the following is a preliminary draft list of major issues impacting the community grouping.

- Community Planning and Capacity Building
 - Resiliency of EMS facilities. Increase stockpiles of supplies, plan sharing
 - Strengthen emergency preparedness and establish evacuation routes
- Housing
 - Relocate or raise houses in flood-prone zones
- Infrastructure
 - Protect Water / Wastewater systems- Develop alternative sources, connect systems
 - Make roads and bridges resistant to flooding. Increase infiltration in Old Erie Canal. Raise roads
- Natural and Cultural Resources
 - Recognize the unique historic resources of the Stockade and surrounding neighborhoods
 - Protect the water quality of the Mohawk River by mitigating overflows associated with flooding
- Economic Development
 - Redevelop brownfield and other underutilized former industrial sites in a way that promotes economic development. Design sites to be more resilient to flooding
 - Strengthen the ability of the communities to take advantage of water-related tourism opportunities
- Health and Social Services
 - Address the potential for drinking water to become contaminated after flooding. Ensure childcare, social, health, mental health and other health and social service facilities located in flood prone areas are protected and if previously damaged receive repair, renovation and rebuilding

1.6 Community Vision

A draft initial Community Vision was reviewed and revised by Committee Members during the second committee meeting, and the public during the first public outreach meeting. Input to the Community Vision included the comments listed below. The Committee then adopted the following as its Vision:

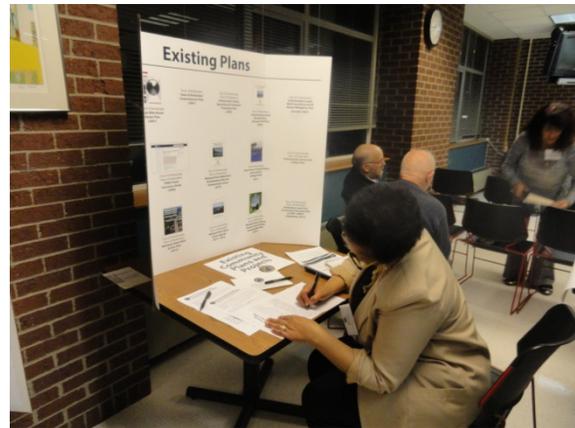


The City of Schenectady and the Town of Rotterdam will be resilient: they will anticipate flood risks, limit impacts to property and infrastructure when flooding is unavoidable, and respond efficiently and recover quickly, in a manner that protects traditional community neighborhoods, quality of life, and takes advantage of waterfront opportunities.

Short-, medium-, and long-term projects identified by the Town of Rotterdam and the City of Schenectady will be developed in the context of this vision statement. They will address the larger issues of regional and community recovery and resilience to support improvements in the quality of life and support the local economy, especially into the future. Input will be solicited from the public and Committee Members, and be guided by the Committee, to ensure the projects meet the vision, goals and needs of the community grouping.

1.7 Public Engagement and the Conceptual Plan

Strong public participation is critical to achieving the opportunities made possible through this unique planning opportunity. The intent is not to rebuild communities and return them to how they were – just as vulnerable to the next exceptional storm (which could come in 500 years or later this year). The intent is to give each community a leg-up on its approach to being vibrant, and economically viable, in the future. There are countless examples of communities across the United States which were wiped out by natural disaster, where inhabitants came together and determined that they would have a vision of an economically viable future, that would allow the community to recover from the disaster but also set it on the path to an overdue economic recovery.



To curate a similar opportunity in Schenectady County, a Public Engagement Strategy was developed to support this planning process. The Planning Committee created a Public Engagement Subcommittee, made up of Committee Members representing both localities to help guide the Strategy which is being used to inform stakeholders, interested observers and the public on the NYRCR program and planning process. It is also being used to initiate a discussion on how to begin the process of adapting the

community to a changing future. The intent is to hear the concerns of homeowners, educate local residents as to the consequences of severe weather events and flooding, and to invite the public to bring up their ideas and provide input into strategies, programs and actions to mitigate the effects of flooding. The hope is that serious and innovative thought will be given as to how to capitalize on any rebuilding efforts or flood mitigation programs to secure long lasting opportunities for future economic development. Appendix B, the Public Engagement Strategy, describes strategies to obtain input from the public that will help inform and shape the NYRCR Plan and provides details on the format of the first public meeting held on September 30, 2013.



Table 1-2 summarizes previous and upcoming committee and public meetings as scheduled at the time of publication of this plan.

Table 1-2 Schedule of Committee and Public Meetings in Rotterdam and Schenectady

Meeting	Location	Date/Time	Attendees	Purpose
Kick-Off Meeting	SCCC 433 State Street Schenectady, New York 12305	9/04/13; 12-2pm	NYSDOS, Co- Chairs, E & E	To introduce the team and discuss the overall NYRRCR program
Committee Meeting #1	SCCC, Room 219, 433 State Street Schenectady, New York 12305	9/12/13; 7-9pm	NYSDOS, Co- Chairs, Committee Members, E & E	Introduce the committee to the program and discuss the schedule.
Public Meeting #1	SCCC, Elston Hall 78 Washington Ave. Schenectady, NY 12305	9/30/13; 7-9pm	NYSDOS, Co- Chairs, Committee Members, E & E, Public	Introduce the overall program to the public. Solicit feedback on the Geographic Scope, Asset Inventory, Community Vision
Committee Meeting #2	Rotterdam Town Hall 1100 Sunrise Blvd, Rotterdam, NY 12306	10/3/13; 7-9pm	NYSDOS, Co- Chairs, Committee Members, E & E	Finalize Geographic Scope and Community Vision. Review critical assets, needs and opportunities, and potential projects
Public Meeting #2	Mabee Farm 1100 Main Street Pattersonville- Rotterdam Junction, NY 12150	11/4/13; 6-8pm	TBD	Solicit input on the content of the Conceptual Plan
Committee Meeting #3	SCCC Main Campus (Location TBD)	11/14/13; 7-9pm	TBD	Review Conceptual Plan and develop strategies and key projects.

The following is a list of Committee Member affiliations for both Rotterdam and Schenectady.

- Planners at the county, city and town level;
- Professors;
- Residents in areas affected by flooding;
- Individuals who played a role in community planning and studies (e.g., Schenectady County All Hazard Mitigation Plan, Rotterdam Junction Long-Term Community Recovery Plan, Rotterdam Junction Brownfield Opportunity Area (BOA) Nomination Study;
- Engineers;
- Representatives from non-profits organizations;
- Chair of the Mohawk River Watershed Coalition;
- Executive Director of the Schenectady Foundation;
- President of the Schenectady County Chamber of Commerce; and,
- President of the Stockade Association.

The Conceptual Plan will be presented for discussion at the second public meeting scheduled for November 4, 2013, at the Mabee Farm in Rotterdam Junction. The final plan will be based on feedback from the community, NYSDOS, Committee Co-Chairs and Committee Members. This is a community Plan – by the time the Final Plan is published – it will showcase the vision of the people of Schenectady and Rotterdam. The Plan will show how the community wishes to reshape itself and become, not only resilient to floods, but also resilient to hard economic times.

2.0 Asset Inventory

2.1 Goal of the Inventory

The heart of a community is of course its people. Their soul is often characterized by the buildings and edifices they have created, the businesses and institutions they value, and, most critically, their homes.

For this plan, community assets are defined as places or things (e.g., water wells) where the economic, environmental and social functions of communities take place, or are considered critical infrastructure in support of such functions. There is a certain subjective leeway to identifying assets for protection; however, there is also a functional value, as insurance companies are eager to see that communities have been pro-active in taking a community approach to reducing the risk from floods, as well as homeowners.

A subset among assets is critical assets, which include specific types of facilities that provide critical communal support or services. It includes, without being limited to, the following:

- Locations which produce, use or store highly volatile, flammable, explosive, toxic or water-reactive materials;
- Hospitals and nursing homes, and housing for the elderly, which are likely to contain occupants who may not be sufficiently mobile to avoid the loss of life or injury during flood and storm events;
- Emergency operation centers, or data storage centers which contain records or services that may become lost or inoperative during flood and storm events; and
- Generating plants, and other principal points of utility lines.

Asset Inventory provides a complete description of the assets located within or outside of an NYRCR Community whose loss or impairment due to flooding and storm events would compromise any essential social, economic or environmental functions or critical facilities.

An asset is defined as a critical facility if it meets FEMA’s definition for a critical facility. If it does not meet FEMA’s requirements but is still significant then it is classified as a “Significant Facility” rather than a “Critical Facility”.

A goal of the planning process is to ensure that the final conceptual plan will be inclusive of all assets, and especially critical assets agreed upon by the communities for call out.

2.2 Methodological Approach

During two committee meetings and one public meeting, Committee Members and members of the general public were presented maps of the project area containing categorized community assets identified by E & E, using data sets received from NYSDOS⁶, as well as those identified in Rotterdam’s draft Long Term Community Recovery Plan, which complements this plan. These maps were presented in PowerPoint presentations at the Committee Meetings and posters at the public meeting. Assets presented on the maps fall into the following categories:

- Economic,
- Health and Social Services,
- Infrastructure Systems,
- Natural and Cultural Resources,
- Infrastructure Systems, and
- Natural and Cultural Resources.

A list of assets was also provided to both Committee Members and the public for review. This list included specific assets rather than solely categories. Significant input obtained from these stakeholder reviews has resulted in the removal of some assets that are no longer in existence, and recognition that some assets are no longer in operation, or are operating under a different use.

A field survey is being conducted to verify the location of assets. Results based on this survey will help to further refine the list of assets. After updating the list, E & E will share with the Committee Members a map containing keyed symbols and numbers corresponding to community assets. A legend will also be provided to correlate numbers on the map to asset names. A final thorough review of the map and legend performed by the committee will finalize the asset inventory. A Draft Asset Inventory is summarized in Appendix C Draft Asset Inventory.

Assets were classified into the six categories and subcategories noted in Table 2-1 below in accordance with the National Disaster Recovery Framework. This was done to help support the analysis required for the planning process, notably to conduct a Risk Assessment, an assessment of Needs and Opportunities, the identification and development of Project Ideas, and not least, a Cost-Benefit Analysis.

FEMA’s definition of a critical facility: *For some activities and facilities, even a slight chance of flooding is too great a threat. Typical critical facilities include hospitals, fire stations, police stations, storage of critical records, and similar facilities. These facilities should be given special consideration when formulating regulatory alternatives and floodplain management plans. A critical facility should not be located in a floodplain if at all possible. If a critical facility must be located in a floodplain it should be provided a higher level of protection so that it can continue to function and provide services after the flood. Communities should develop emergency plans to continue to provide these services during the flood.*

⁶The data sets provided by NYSDOS originated from Federal Communications Commission, Insurance Services Office, Inc., National Oceanic & Atmospheric Administration, NYS Department of Environmental Conservation, NYS Department of Health, NYS Department of Transportation, NYS Division of Homeland Security & Emergency Services, NYS Division of State Police, NYS Office for People with Developmental Disabilities, NYS Office of General Services, NYS Office of Information Technology Services, NYS Office of Mental Health, and NYS Thruway Authority. Additionally, E & E incorporated data from NYS Department of Environmental Conservation (2009), ESRI (2010), National Park Service (2011), NYS Department of Health (2010), NYS Education Department (2000), Platts (2009), the 2012 NYSDEC-FEMA Mohawk Flood Project.

Table 2-1 Types of Assets

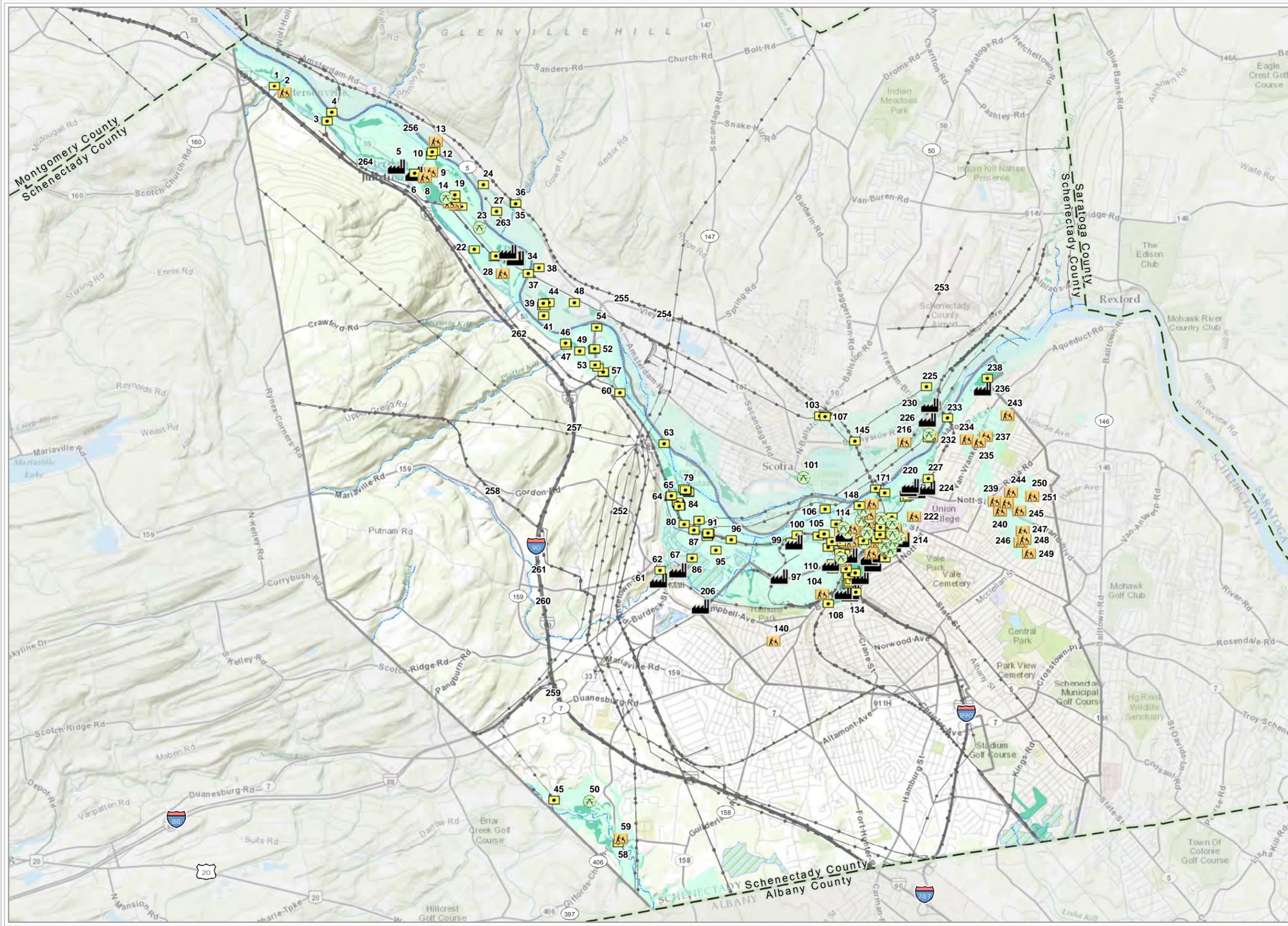
Asset Class	Asset Example
Economic	office buildings, business and industrial parks, manufacturing, warehouses, storage facilities, grocery stores, restaurants, banks, lodging, storefronts, downtown center, seasonal/tourism destinations
Health and Social Services	schools, health care, day care, elder care, emergency operations, government and administrative services, media and communications, police, fire and rescue
Housing	single-family and multi-family dwellings, supportive housing/group homes, senior housing and affordable housing
Infrastructure Systems	State Canal System facilities, pedestrian, bicycle and vehicular ways, transit, bridges, airports, rail, ports, ferries, gas stations, water supply, stormwater, wastewater, solid waste and recycling
Natural and Cultural Resources	natural habitats, wetlands and marshes, recreation facilities, parks, public access, open spaces, agricultural areas, religious establishments, libraries, museums, historic landmarks, performing arts venues
Vulnerable Populations	assets predominantly providing housing and services for people with disabilities, low and very-low income populations, the elderly, young children, homeless and people at risk of becoming homeless

There is a strong possibility that some assets within the first five classes may also serve Vulnerable Populations. As a result the inventory spreadsheet (Appendix C) has been reformatted so that Vulnerable Populations are identified in a separate column, in addition to their identification in the other five asset classes.

2.3 Asset Inventory Results

Figure 2-1 Community Assets indicates the community assets determined by the Draft Asset Inventory. Critical assets or assets located within the 500-year flood plain include those that primarily fall under the Infrastructure Systems, Natural and Cultural Resources, Health and Social Services as well as Economic categories. In the Town of Rotterdam, the following critical facilities fall within the 500-year flood plain:

- St. Margaret of Cortona
- Power Plant- SI Group
- Various bridges
- Town of Rotterdam and City of Schenectady drinking water wells
- Drinking water treatment plant



Community Assets Overview

City of Schenectady and Town of Rotterdam

October 2013

- Assets Class**
- Economic
 - Health and Social Services
 - Infrastructure Systems
 - Natural and Cultural Resources
 - Infrastructure Systems Line
 - Natural and Cultural Resources Line
 - Natural and Cultural Resources Polygon
- 500-Year Flood Zone
- Study Area – 10-Foot Buffer of 500-Year Flood Zone



ESRI - World Topo Imagery
NYS DOS, NYS DEC, NPS, NYS DOH,
NYS ED, Platts, NYS DEC-FEMA Mohawk Flood
Project - Assets



In the City of Schenectady, the following critical facilities fall within the 500-year flood plain:

- Various industrial, manufacturing warehouse sites (e.g., EPlan facility- Capiello)
- Educational facilities (Katherine Burr Blodgett Success Academy for Middle School Students, SCCC, and Education Opportunity Center)
- North and South Ferry Street pumping stations
- Schenectady Waste Water Treatment Plant
- NYS Office for People with Developmental Disabilities
- General Electric
- State Street and Broadway Downtown Transit Station

There are no hospitals located in the study area (the 500-year flood plain plus the 10-foot elevation buffer). All assets identified in the study area will be prioritized as high, medium or low immediately following the refinement of the Draft Asset Inventory (Appendix C). In order to easily locate or identify an asset on the map, each asset listed in Appendix C has a unique number that corresponds with an asset on the map. Additional refinement of this list of assets will take place during the public outreach described above as community members review the list.

3.0 Risk Assessment

3.1 Introduction

Risks depend on the likelihood, or frequency of risk, and the magnitude of the consequence of a risk. The consequence of a risk by itself does not dictate the appropriateness of a response. The following conceptual matrix is frequently used to focus planning efforts toward the mitigation of risk.

		Outcome			
		Negligible	Marginal	Critical	Catastrophic
Likelihood	Certain	High	High	Extreme	Extreme
	Likely	Moderate	High	High	Extreme
	Possible	Low	Moderate	High	Extreme
	Unlikely	Low	Low	Moderate	Extreme
	Rare	Low	Low	Moderate	High

For example, the risk of wind damage to a solid structure like the new Schenectady City Center from a tropical storm is “Negligible” (Column 1) even though it is “Possible” (Row 3). This leads to a risk assessment of “Low.” The same conclusion might not be appropriate in a neighborhood with buildings surrounded by trees. Likewise, although the flooding of a riverine wetland would be “Likely,” the consequences of flooding a wetland are “Negligible” so the risk assessment is “Moderate.” At the other scale, the likelihood of a tornado at any single point in the study area is “Rare,” but the outcome to a sensitive facility would be “Catastrophic,” rendering the risk “High.”

When risks and likelihoods can be quantified, risk assessors can multiply numerical values to get a quantitative risk assessment. In the case of flood risks for Rotterdam and Schenectady, this can be done semi-quantitatively. The risks of flooding are related to elevation of a specific site, and the outcome of flooding depends on the resource. For example, the outcome of the flooding of a baseball field is negligible, whereas flooding of a hospital can be catastrophic.

When the risk assessment is complete, this matrix will be consulted conceptually to identify the most critical resources and to prioritize projects (see Section 5.2) that mitigate risks.

3.2 Hydraulic Modeling Baseline

The available FEMA models are proposed for use in the risk assessment task. The limitations of the models, as well as a description of possible updates, are provided below. Several streams will require significant updates to the current models due to the age of the available data and the type of modeling that was originally conducted. Many streams do not have available FEMA models and will require alternative methods of evaluation for the risk assessment task. Non-modeling methods of assessing flooding risk potentially limit the ability to quantitatively evaluate the effectiveness of flood mitigation measures proposed. This can impact how cost estimates, project prioritization, and recommendations are developed for further tasks.

E & E is in the process of evaluating each community and proposing a method for conducting the risk assessment, taking into considerations available data and its limitations.

City of Schenectady

The only stream with an available hydraulic model that is located within the City of Schenectady is the Mohawk River. A portion of the Mohawk River (from near the confluence with Kromme Kill to just downstream of the Isles of the Oneidas) has an updated HEC-RAS model that was prepared in 2007 and submitted to FEMA for review in 2009. This model is part of a preliminary countywide update to the FIRM and FIS for Schenectady County and has yet to be approved by FEMA but is the best available information that could be used to evaluate flood hazard. The 2007 HEC-RAS model was completed prior to the most recent large storm events and therefore geomorphic and hydrologic changes may have occurred within the watershed since the original model's completion.

Existing LIDAR data (2 meter DEM) are available for the City of Schenectady and could be used to adjust the model to some extent. Given the date LIDAR data were produced (2008), it is unlikely the FEMA model for this portion of the Mohawk River will require changes.

The remaining portion of the Mohawk River hydraulic model was completed in 1983 and is only available from NYSDEC in HEC-2 format via hard paper copies. This model would need to be converted to a usable digital format and rerun through HEC-RAS in order to perform the risk assessment; this could take an additional level of effort.

Existing LIDAR and topographic data can be used to revise the upstream portion of the Mohawk River hydraulic model, which may take a significant level of effort. The scale of the topographic information (2 meter DEM) and production date (2008) may limit the accuracy of the stream geometry and channel profile unless further stream surveys are conducted.

Stream field surveys may be undertaken at some point to properly develop the hydraulic model as well as verify the current conditions of bank stability and stream infrastructure (e.g., bridges, culverts, dams, etc.).

The Flood Insurance Study (FIS) provided from FEMA indicates that historically the main source of flooding along the Mohawk River in the vicinity of the City of Schenectady is due to ice blockages. However in more recent years, large hydrologic events including Hurricane Irene and Tropical Storm Lee have also been significant contributors to flooding. Flood elevation stage-frequency correlations were developed in the FIS using gauge stations along the Mohawk at two structures to evaluate the potential impacts of ice on localized flooding. During historic ice jams the water elevations were recorded in some

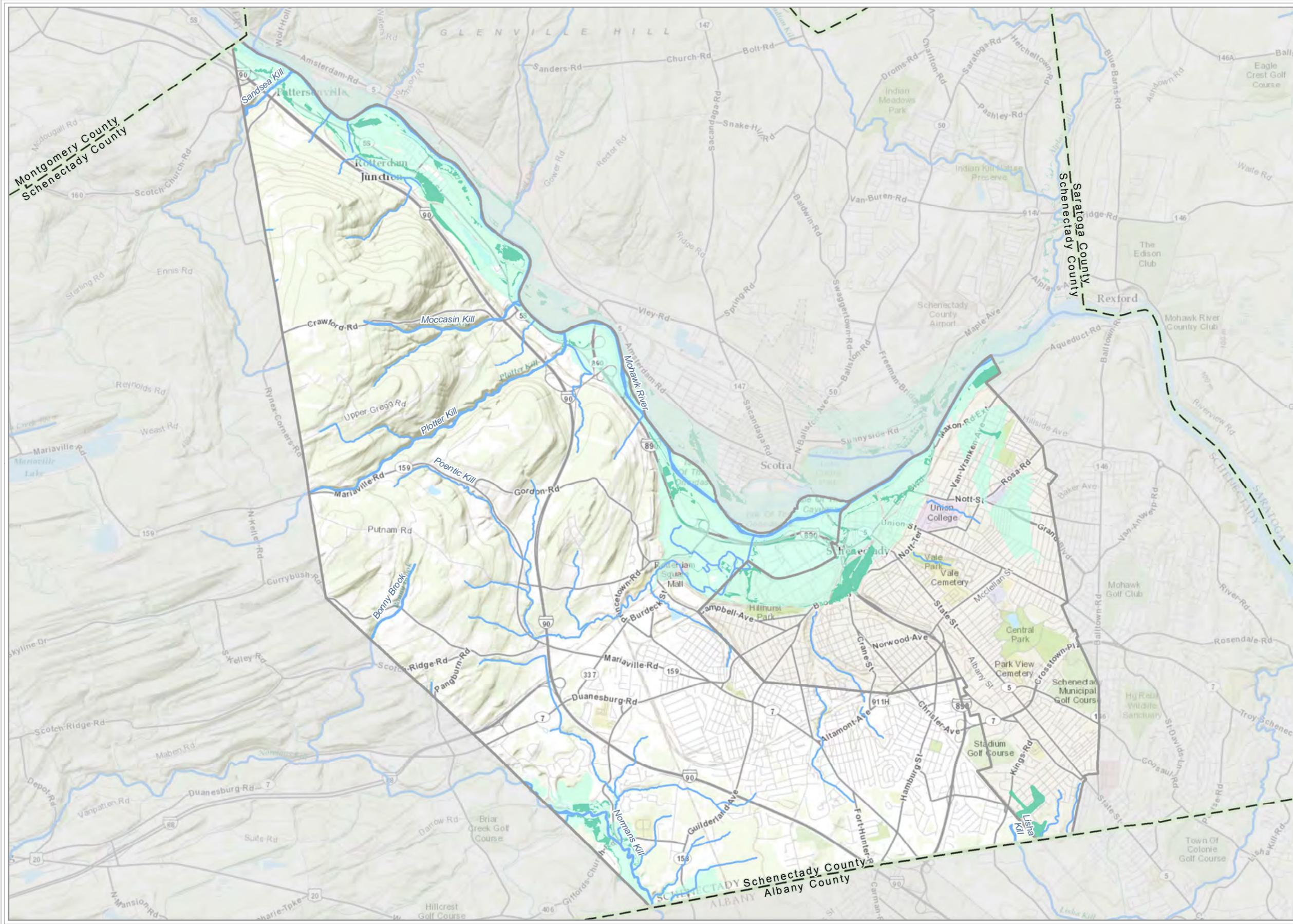
locations approximately 13 feet above their normal river stage. For similar non-ice related flooding events, water elevations were recorded approximately only 2 feet above their normal river stage (FIS 2012). Due to the scarcity of river stage information during ice-jam events and the limitations of the HEC-RAS model to accurately predict ice blockage impacts, water surface profiles of the Mohawk River were not modeled in the existing flood study information.

Town of Rotterdam

The portion of the Mohawk River located in Rotterdam was modeled using the HEC-2 hydraulic model and is based on pre-1983 data. Significant updates, as described for the City of Schenectady above, would be required in order to provide usable, realistic output that can be used for the risk assessment and evaluation of mitigation alternatives. Limitations of the model output for the Town of Rotterdam are similar to limitations for the City of Schenectady.

Additional tributary models are available for the Town of Rotterdam and include Lisha Kill, Plotter Kill, Sandsea Kill, and Poentic Kill (Figure 3-1). Minor tributary models are not available. The table below indicates what type of model is available and what year it was produced by FEMA. Lisha Kill, Plotter Kill and Poentic Kill were modeled in 2007 using HEC-RAS; significant updates to these models are unlikely. Sandsea Kill is only available in HEC-2 hard-paper copy, based on pre-1983 data. They need significant updates to reflect current hydrologic and hydraulic conditions.

LIDAR data is available for the town of Rotterdam and could be used to update the models in HEC-RAS but it should be noted that LIDAR was produced in 2008 which is prior to recent large storm events. It is likely that geomorphic and hydrologic changes have occurred in these tributaries since 2008. A field stream survey of these tributaries is recommended at some point to verify the existing conditions of the water courses for the model updates, although field surveys cannot be completed as part of the NYRCR scope.



Waterbodies City of Schenectady and Town of Rotterdam

October 2013

-  River or Stream
-  500-Year Flood Zone
-  Study Area – 10-Foot Buffer of 500-Year Flood Zone



ESRI - World Topo Imagery



3.3 Evaluate Mitigation Alternatives

The following steps will be undertaken to evaluate flood mitigation alternatives during the planning process.

- a. Develop potential flood impact management actions within the program framework for the following categories of flood hazard mitigation:
 - i. Property Protection
 - ii. Flood Damage
 - iii. Natural Resource Protection
 - iv. Structural Projects
 - v. Community Pollution Prevention
 - vi. Public Education
- b. For the types of flood mitigation actions defined, the effectiveness of proposed mitigation actions for the prescribed statistical flood events will be assessed. Adverse impacts of combined measures, if any, will be identified, as will means to modify proposed measures to eliminate adverse effects. Analysis will be designed to identify projects that are likely to be successful in reducing flood hazards and that provide mitigation measures. The alternatives analysis will be used to develop written recommendations for the report and to allow for communities to engage in project review and ranking. It is expected that further detailed analysis of alternatives will be completed outside of the planning process.

Mitigation measures that can reduce the consequences of flood conditions can include:

- Buyouts of flood-prone structures and relocation of residences or services
 - Land use practices to reduce flooding, such as:
 - The creation or expansion of detention ponds to retain flood waters and increase infiltration to ground water;
 - Creation of grassy swales and diversions to capture and retain runoff from paved surfaces;
 - Rain gardens to retain and utilize rooftop drainage;
 - Alteration of structures to minimize damage, including:
 - Construction of berms
 - Removal of sensitive equipment from first floors
 - Elevate buildings atop new piers
 - Purchase of flood insurance.
- c. Alternatives will be evaluated based on tangible benefits, project goals, impacts, regulatory requirements, and costs associated with design and construction. Implementation strategies will be developed based on community-approved projects and strategies.
 - d. Evaluate the effectiveness of successful mitigation from non-structural alternatives that will not try to control flood waters but instead reduce flood damage by utilizing land use measures and appropriate construction techniques to provide safety in the flood prone areas. Evaluation and recommendations may include vegetative protection, elevation, flood proofing, relocation, zoning or other land use regulations or programs, acquisitions (fee or easements), exchange of parcels, and purchase of flood insurance, potentially with “increased cost of compliance” coverage.
 - e. Develop preliminary cost estimates for successful mitigation actions.
 - f. Identify the need for any future data collection, analysis, and design.

4.0 Identification of Needs and Opportunities

4.1 Community Profile

4.1.1 Demographic Impact on Long-Term Community Recovery

Resilience in the face of natural disasters is largely the result of the physical scale of the disaster and the socioeconomic conditions of the impacted community. Understanding the study area’s demographics is central to rebuilding in a resilient way.

- Population growth in both the City of Schenectady and the Town of Rotterdam is lower than the New York State average. Between 1990 and 2010, the City of Schenectady experienced slow growth (less than 1.0%). The Town of Rotterdam’s population increased 2.5% over the same period. During the same period, the State of New York experienced a 7.7% increase in population (Table 4-1).
- The Town of Rotterdam experienced a 6.7% increase in the number of households between 2000 and 2010, while the City of Schenectady had a 1.4% increase.
- In both communities, there is an increasing number of small households which indicate a trend toward more single person and single parent households.
- The City of Schenectady has a younger population and a significant minority population.
- The Town of Rotterdam has an older, predominantly white population.

Table 4-1 Population Change

Municipality	1990 Census	2000 Census	2010 Census	Percent Change 1990-2010
City of Schenectady	65,566	61,821	66,135	0.9%
Town of Rotterdam	28,395	28,387	29,094	2.5%
Schenectady County	149,285	146,555	154,727	3.6%
New York State	17,990,455	18,976,457	19,378,102	7.7%

Source: 1990, 2000 and 2010 US Census.

4.1.2 Community Planning and Capacity Building

- A significant amount of community planning has occurred at the regional, local and neighborhood level. Much of it predates Hurricane Irene, Tropical Storm Lee and the May 2013 storm.
- Planning at the regional level includes:
 - Updating the 2007 County Multi-Jurisdictional All Hazard Mitigation Plan.
 - 2011 County Certified Emergency Management Plan (CEMP).
 - Mohawk River Waterfront Revitalization Plan for Schenectady County (2010).
 - Schenectady County Mohawk River Blueway Trail Plan (2008).
- Planning at the local level (Town of Rotterdam and the City of Schenectady) includes:
 - Rotterdam Junction Draft Long-Term Recovery Plan (LTCR) (2013)
 - Rotterdam Junction Brownfield Opportunity Area Nomination Study (2013).
 - Town of Rotterdam Comprehensive Plan (2001)
 - Vision 2020: Town Parks and Recreation Plan (2010)
 - Land Use Regulations and Wellhead Protection (Chapter 270 of Town Code)
 - City of Schenectady Comprehensive Plan and Zoning Ordinance (2008)

- City of Schenectady Gateway Plaza Implementation Plan (2012)
- Draft North Schenectady Urban Renewal Area Plan

4.1.3 Economic Development and Local Economy

- Rotterdam Junction residents generally work outside the hamlet.
- The largest employers in the City of Schenectady include government agencies and health care and education sector employers including Ellis Hospital, Schenectady County, Schenectady City School District, MVP Health Plan and Union College.
- Schenectady’s median income lags behind New York State and the County by \$20,000.
- The median household income in the Town of Rotterdam was \$60,507 in 2011.
- Unemployment rate in the City of Schenectady decreased from 9.6% and from 7.6% to 6.6% in the Town of Rotterdam in August 2012 to 8.3% in August 2013. These rates are higher than the County or State average.
- An estimated 83.3% of Schenectady residents over the age of 25 have a high school diploma or higher. The Town of Rotterdam has a significantly higher rate at 92.9%.
- Table 4-2 does not provide information on the low-income level in Rotterdam Junction where most of the flood damage occurred in the Town of Rotterdam.

Table 4-2 Household Income and Poverty Rate Comparison

Municipality	Median Household Income	Per Capita Income	Families Below Poverty Level	Individuals Below Poverty
City of Schenectady	\$37,436	\$20,149	18.1%	22.6%
Town of Rotterdam	\$60,507	\$28,979	4.0%	5.3%
Schenectady County	\$55,587	\$28,001	8.4%	12.0%
New York State	\$56,951	\$31,796	11.0%	14.5%

Source: 2007-2011 US Census Bureau American Community Survey (ACS) 5-Year Estimate.

4.1.4 Health and Social Services

- City of Schenectady has a full range of health and human services provided by Schenectady County and other organizations (e.g., Ellis Hospital on Nott Street, Bellevue Women’s Center on Troy-Schenectady Road, and St. Clare’s on McClellan Street).
- Senior centers in Rotterdam as well as Ellis Hospital and Bellevue provide medical services to Rotterdam residents.
- The majority of households possessing one or more characteristic of a vulnerable population reside in the City of Schenectady.
- The City of Schenectady provides an in depth discussion about the needs of its vulnerable populations as part of 2010-2014 Consolidated Plan.

Table 4-3 Vulnerable Population

	City of Schenectady	Town of Rotterdam	Schenectady County
Total Population	66,135	29,094	154,727
Area in Square Miles	10.9	36.0	207.5
Population Density/Sq. Mile	6,067	808	745
>65 years old	7,564	5,337	23,083
% minority population	42.5%	6.6%	22.8%

Table 4-3 Vulnerable Population

	City of Schenectady	Town of Rotterdam	Schenectady County
Median Income	\$37,436	\$60,507	\$55,587
% individuals below poverty	22.6%	5.3%	12.0%
Total households	26,633	12,314	62,886
Households with less than \$25,000 income	8,118	2,012	12,982
Linguistically isolated individuals ⁷	2,845	548	4,738

Source: 2010 Census and 2007-2011 US Census Bureau American Community Survey (ACS) 5-Year Estimate

4.1.5 Housing

- In 2010, the City of Schenectady had 30,095 housing units, 88.5% of which were occupied. Owners made up 43.8% of the occupied housing and renters made up 56.2%. Nearly 80.0% of Rotterdam residents were homeowners, while renters comprised 20.7%.
- Majority of the City of Schenectady and the Town of Rotterdam housing stock is in single-family structures.

Table 4-4 General Housing Characteristics

Municipality	Single Family	Two Family	Multi Family (3+ units)	Mobile Homes	Other
City of Schenectady	12,328 (38.8%)	10,435 (32.9%)	8,924 (28.1%)	61 (0.2%)	0 (0.0%)
Town of Rotterdam	9,948 (81.0%)	551 (4.5%)	1,763 (14.4%)	12 (0.1%)	0 (0.0%)
Schenectady County	41,398 (60.9%)	11,905 (17.5%)	14,257 (21.0%)	432 (0.6%)	0 (0.0%)
New York State	3,793,524 (46.9%)	872,040 (10.8%)	3,211,571 (39.7%)	200,756 (2.5%)	3,412 (0.04%)

Source: 2007-2011 US Census Bureau American Community Survey (ACS) 5-Year Estimate.

- The City of Schenectady has an aging housing stock, with nearly two-thirds of structures built earlier than 1940. Aging homes can be difficult to repair following flood damage.
- Historic homes present their own set of unique challenges that need to be addressed. 16.2% of Rotterdam’s housing was built earlier than 1940.
- The increasing cost of housing may make it difficult for lower-income households in both communities to maintain homeownership. For instance, the rent and cost burdens are high and owner-occupied housing ratios are also well above normal.

4.1.6 Infrastructure

- The City of Schenectady and the Town of Rotterdam have both completed transportation and transit studies addressing bus rapid transit, road diets and multi-modal systems:
 - NYS Thruway Exit 26 and I-890 Land Use and Transportation Study (2008)
 - Mohawk Hudson Bike-Hike Trail (1998)
- The wellfield in Rotterdam Junction is located between Parkis and Putnam Streets and provides water from the western county line to the Baan Farm property line just west of the Exit 26 Bridge. The location of nonresidential uses and septic fields in the wellhead protection area are a potential threat to this water source.

⁷ A linguistically isolated household who speaks English less than “very well”

- The primary water source that serves the majority of the Town of Rotterdam's residents is the Rotterdam Well fields, located on the north side of Rice Road abutting the Mohawk River, approximately 3,000 feet west of Lock 8. Rotterdam Junction has two separate wells off of Main Street that serve Rotterdam Junction residents.
- The City of Schenectady's well fields are located in close proximity to the Town of Rotterdam's wellfields. The public water system serves the entire community and portions of the surrounding towns of Rotterdam and Niskayuna. The water system has adequate supply capacity and a well-maintained distribution system.
- The City of Schenectady's water is pumped from the Great Flats Aquifer by a series of twelve wells located at the City's water treatment plant on Rice Road in the Town of Rotterdam.
- There is no sanitary sewer service in the area from Lower Rotterdam Junction to SCCC; all homes and businesses are on septic systems.
- The Great Flats Aquifer is designated as a sole source aquifer by the EPA and the State Department of Health. The Schenectady Intermunicipal Watershed Board has rules and regulations for land use within the aquifer recharge zone I-IV.
- All properties from the Montgomery County line to SI Group (located in the southeasterly portion of Rotterdam Junction) are on septic systems.
- Schenectady County Community College is connected to the City's waste water treatment plant.
- Stormwater catch basins are in place in Rotterdam Junction.
- The City of Schenectady's sanitary sewer system covers virtually the entire city with the exception of a few residential homes that utilize individual septic systems at the outer edges of the Woodlawn neighborhood outside the Study area.
- The City's sewer treatment plant was completed in 1973. It is located along the Mohawk River, near the City's border with the Town of Niskayuna and was impacted by Hurricane Irene.
- National Grid provides natural gas service throughout the City of Schenectady.
- National Grid also provides electric power distribution throughout Schenectady County.
- The Town of Rotterdam is served by a Volunteer Fire Department.
- The City of Schenectady Fire Department provides fire, emergency medical services (EMS) and advanced lifesaving support services (ALS), mutual aid response to the Town of Rotterdam and Village of Scotia, advanced lifesaving support services for Duanesburg Ambulance, automatic aid to the Town of Niskayuna, confined space rescues, and emergency services on a contracted basis to General Electric.
- The Town of Rotterdam has a police department of 42 officers, 75 total sworn and civilian members and an emergency response team.
- The Schenectady Police Department currently employs approximately 160 officers. Seventy-five civilian staff members hold various administrative and clerical positions.
- Facilities owned and operated by the NYS Canal Corporation, as the Mohawk River is a canalized waterway and part of the State Canal System.

4.1.7 Natural and Cultural Resources

- The Mohawk River is a vital link in the transportation and recreation waterways of the Northeast.
- Within Rotterdam's Waterfront Area, there are four NYSDEC-designated wetland areas, all located south of Route 5S.
- There are federal wetlands regulated by the U.S. Army Corps of Engineers in the area between the Rice Road exit ramp of I-890 and the Mohawk River. This area has also been identified as a locally important wildlife habitat by NYSDEC Senior Wildlife Biologist Karl Parker.
- There are seven parcels of land totaling 227 acres, of which 121 acres are listed in the Schenectady County Agricultural District west of Rotterdam Junction.

- Schenectady County as a whole has 91 historic sites. Historical sites in the City of Schenectady include:
 - The Stockade neighborhood, located in the City of Schenectady, represents New York State’s first National and State Registered Historic District.
 - H.S. Barney Building – 217-229 State Street
 - Central Fire Station – Erie Boulevard
 - Foster Building (Foster Hotel) – 508 State Street
 - The former Hotel Van Curler – 78 Washington Avenue
 - F.P. Proctor Theatre and Arcade – 432 State Street
 - Schenectady Armory – 125 Washington Avenue
 - Schenectady City Hall– Jay Street
- Rotterdam Junction is an area rich in history and is the location of several historic homes and properties including the oldest home in the Mohawk Valley, the Mabee Farm Historic Site
- Several small city parks exist in the Study Area, however, most of the City’s large active park land is outside the Study Area. Front Street Park and Riverside Park are both located in the Stockade along the Mohawk River. Liberty Park and Veteran’s Park are both located on State Street and are passive parks with memorials. South Avenue Park encompasses 0.35 acre and includes a basketball court, tot lot and play equipment.

4.2 Community Needs and Opportunities

4.2.1 Community Planning and Capacity Building

Gaps, weaknesses, and constraints

- With the exception of the Rotterdam Junction LTCR Plan, the Rotterdam Junction BOA Nomination Study, and the City Gateway Implementation Plan all plans developed in Schenectady County, Rotterdam and the City predate Hurricane Irene and Tropical Storm Lee.
- The Town of Rotterdam Comprehensive Plan is 13 years old and should be updated to reflect changes in the community and its vision for the future with regard to land use, economic development, resource protection and community services.
- The Town of Rotterdam Zoning may require some revisions to address changes in land use development goals and priorities.
- During the Irene storm, flooding caused damage to bridges, roads to wash out, and created a situation in which residents were stranded and needed to be rescued by boat or escorted across the Lock 9 Bridge one vehicle at a time. Therefore, alternative and multiple evacuation routes need to be established to prevent this from happening in the future.
- Based on input from the Rotterdam Junction flood recovery effort, emergency services are currently lacking capacity to adequately serve the community during a disaster and need to be updated and expanded to include additional generators, emergency equipment, electrical upgrades, trailers, etc.

Recommendations and Opportunities (see Section 5 for specific projects)

- Training – Additional training for all code enforcement personnel as well as other appropriate Town of Rotterdam personnel in all aspects of Town government and the provision of services.
- Update Emergency Response and Evacuation Plan - Work with Schenectady County to refine and improve the existing emergency response and evacuation plan to address lessons learned during Hurricane Irene and Tropical Storm Lee. Provide adequate education about the plan to inform residents of proper protocols for future events.
- Update Town of Rotterdam Comprehensive Plan – It is recommended that all Comprehensive Plans (and therefore Zoning) be updated every five to ten years.

- Develop specific projects to reduce the impacts of flooding or mitigate the unavoidable impacts

4.2.2 Economic Development and Local Economy

Identification of gaps, weaknesses, and constraints

- Schenectady’s significant percentage of low and moderate income residents and residents living below the poverty line limits the City’s ability to absorb losses and enhance resilience to hazards.
- In Rotterdam Junction, small business owners have lost inventory and customers, and suffered other financial losses. Some of these businesses, already struggling during a tough economic market, may not be able to replace these losses.
- Flood impacts from Irene in areas of the City previously identified for development, such as East Front Street and the ALCO site, may impact development feasibility.
- Flooding impacted parking lots and buildings at Schenectady County Community College.
- Rotterdam Junction is limited in development by the Great Flats Aquifer. This underground water source supplies 50% of the drinking water consumed by the area overlying the aquifer. These areas have no alternative drinking water supply. In addition, the Great Flats Aquifer is designated as a sole source aquifer by the EPA and State Health Department. It is also designated by the NYSDEC as a Critical Environmental Area (CEA). To be designated as a CEA, an area must have an exceptional or unique character. As a result an Aquifer Protection Zone has been established to further protect this drinking water resource.
- Parts of Rotterdam Junction are located at one of the lowest elevations in the County due to their location along the Mohawk River making it difficult for new development. Economic development in the Study Area is constrained by lack of public water and sewer, as well as the presence of the Great Flats Aquifer.
- Development constraints in the Rotterdam Junction Brownfield Opportunity Area indicate that the most feasible development in the Study Area will be small-scale and low impact. Industrial development is limited due to the size of available property and lack of public sewer.

Recommendations and Opportunities (see Section 5 for specific projects)

- Implementation of the City’s Gateway Implementation Plan will enhance a key City gateway, improve connections between SCCC, downtown and the Stockade neighborhood.
- Continue pursuit of redevelopment of the riverfront ALCO site in the City.
- Develop additional passive and active recreational amenities on the river in the area of East Front Street and in connection with the Hudson Mohawk Bike Hike Trail.
- Encourage economic development in areas of existing commercial uses in Pattersonville and Rotterdam Junction.
- The area west of the Exit 26 Bridge presents opportunities for economic development given its excellent highway access and recent public water service expansion on Route 5S to a point adjacent to the west side of the Exit 26 Bridge. In particular the Baan’s Farm south of Route 5S outside the flood plain is a potential development site. The portion of this farm north of Route 5 is located predominately in the flood plain and a water dependent use would be more appropriate.
- Educational development opportunities exist to reuse the Woestina Elementary School and to develop workforce training opportunities in conjunction with Schenectady County Community College.
- Retail and commercial development should focus on services for the Study Area’s aging population, as well as adaptive reuse of existing housing stock for small businesses.
- Residential development should consider the needs of the Study Area’s aging population.

- Tourism and recreation development presents a significant opportunity in the Study Area. Developing new assets and connections to existing assets will be an important economic development task.
- The expansion of the Mabee Farm Historic Site will potentially attract 24,000 visitors a year.

4.2.3 Health and Social Services

Identification of gaps, weaknesses, and constraints

- People living in poverty (22.6% of Schenectady’s population) who are dependent on social services are already economically and socially marginalized and require additional support in the post-disaster period. Special needs populations (infirm, mentally or physically disabled, homeless) are disproportionately affected during disasters.
- The considerable percentage of female headed households in Schenectady and Rotterdam can challenge recovery, often due to lower wages and family care responsibilities. The households may lose time and money caring for children when daycare facilities are affected. Large families often have limited finances to outsource care for dependents of various ages.
- Schenectady’s increasing racial diversity can pose language and cultural barriers that affect access to preparedness and post-disaster information, funding, and social services.
- Growing numbers of seniors, some with physical or mental impairments and many lacking private transportation, are especially vulnerable and require a higher level of care during recovery.
- The population of Rotterdam Junction is significantly restricted by the Mohawk River and Interstate 90; therefore it is important that when flooding occurs, residents’ immediate needs such as gas, food, etc. should be met close to their homes. Additionally, alternative routes should be established to guard against residents being stranded because of damage to bridges and impassable roadways.

Recommendations and Opportunities (see Section 5 for specific projects)

- Identify health and social service buildings that can serve as emergency shelters (e.g., senior centers, churches, schools, SCCC buildings)

4.2.4 Housing

Identification of gaps, weaknesses, and constraints

- The value, quality, density, and age of Schenectady’s residential building stock affect potential losses, recovery, and likelihood that owners will rebuild.
- A high percentage of City and Town renters who are cost burdened may lack access to information about financial aid during recovery. In some cases renters may lack sufficient shelter options when housing becomes uninhabitable or too costly.
- As mentioned above, many homes and businesses were damaged and/or destroyed in the flood. Seventy-five percent of the homeowners have completed the gutting, repairing, and rebuilding process and now reoccupy their homes. Other homeowners have temporarily, perhaps permanently, walked away from their homes that are in an unlivable condition. Some of these homes have already become health and safety issues, as saturated houses rot and mold within a few feet of their neighbor. The cost to repair many of these homes will likely exceed the financial means of numerous homeowners. Many of the houses damaged in Rotterdam Junction were outside the flood zone or were older homes with no mortgages and therefore not required to carry flood insurance. The lack of flood insurance limits the financial reprieve for these homeowners. Other homes damaged within the flood zone will need to adhere to Federal Emergency Management Acts (FEMA) regulations for repairing/rebuilding which will bring about its own challenges for homeowners.

Recommendations and Opportunities

- Housing Acquisition Buy-Back - Purchasing of homes from the owners who do not want to rebuild or return to their homes. These homes would then be demolished or sold to other individuals to be rebuilt so that they could be occupied again and returned to the tax rolls.
- Absent the ability to remove residences from the flood prone areas due to the historic nature of the Stockade neighborhood, identify alternatives for mitigating future flooding.

4.2.5 Infrastructure

Identification of gaps, weaknesses, and constraints

- During Hurricane Irene, the majority of flood damage occurring to private properties in Rotterdam Junction was due to flood waters overflowing from the old Erie Canal system (which was abandoned in 1915 and is poorly drained), across the Bike Trail and into low-lying areas of the Junction. Private properties and community roads use the canal for normal drainage. Many culverts exist to drain areas of the canal towards the river in two directions, with a high point existing near Iroquois Street; however lack of maintenance kept several culverts clogged. This situation exacerbated the flooding conditions by preventing the drainage of flood waters from these properties. Additionally, during the Irene event, flooding at the northwesterly and southeasterly egress routes on Route 5S were submerged with flood waters, making the only route out of the Junction being the Route 103 bridge. However, this bridge was closed due to accumulating debris creating safety concerns. Subsequently it was severely damaged during Tropical Storm Lee and impassable, making the hamlet landlocked. On Monday of the Hurricane Irene event, vehicles were allowed to cross one at a time and other rescues were performed by boat.
- Rotterdam Junction, with the exception of the SI group is on septic systems, this limits the economic development opportunities in this area.

Recommendations and Opportunities

- In order to prevent the same flooding issues from occurring in the future, the Town has identified several infrastructure projects that will help alleviate these problems (see Section 5 for specific projects). Study the adequacy of infrastructure to handle high volumes of water over short durations and identify methods of addressing the existing issues such as daylighting creeks and utilization of green infrastructure and other best practices.
- Stockpile more emergency supplies (food, water, blankets, generators, radios, etc.) at multiple locations

4.2.6 Natural and Cultural Resources

Identification of gaps, weaknesses, and constraints

- The Rotterdam wellhead facility requires an automatic transfer switch to turn on the generator during a power outage, and berms to prevent flooding.
- The historical significance of the Stockade Neighborhood and individual structures creates complexities for flood mitigation.
- The Erie Canalway Trail is 365 miles long connecting Albany and Buffalo; however gaps exist, including in Rotterdam Junction. The trail through Rotterdam Junction is also part of the Mohawk-Hudson Bike-Hike Trail (MHBHT), which is a 42-mile trail in the Capital District and is the most heavily used trail in the region. The gap here is caused by Guildford Rail's (Pan Am Railways) blocking the former crossing at Scrafford Lane. Trail users are detoured a half mile along busy Route 5S, while some users must cross while weaving through train cars.

- Recreational enhancements to Rotterdam Junction are essential to the long-term revitalization of the hamlet for both residents and tourists.
- The Rotterdam Junction and Pattersonville area west of Lock 9 currently does not have any public access to the river. Rotterdam is seeking to identify and secure access for emergency services and enhance recreational uses for this area. One opportunity is the potential to create a public park/recreation area on Canal Corporation land east of the Lock 9 Route 103 Bridge (8 acres that are outside the Canal Corporation’s designated dredge spoil area). This property is within walking distance of Rotterdam Junction and has seen development of upscale single family residential community and condominium complex in the immediate vicinity. Another opportunity is to enhance existing recreational areas such as the proposed Kiwanis Park improvement of the existing boat launch, restroom facilities, and parking area rehabilitation. Other recreational facilities that could be improved are Lock 8 and Gateway Landing. Possible improvements include, but are not limited to, installing restrooms, potable water, and information kiosks.

Recommendations and Opportunities (see Section 5 for specific projects)

- Encourage existing agricultural uses Pattersonville and Rotterdam Junction to continue by participation in Schenectady County Agriculture District, and continued Agricultural Zoning. Continued preservation of scenic qualities of the undeveloped Rotterdam Hills, and the rural landscape west of Campbell Road. Preservation of the wildlife habitats on the undeveloped lands between I-890 and the River as well as the wetland environments regulated by the US Army Corp of Engineers, and NYSDEC.
- The Rotterdam wellhead facility requires an automatic transfer switch to turn on the generator and protection from flooding through the use of berms.
- Identify a flood mitigation strategy for the Stockade neighborhood and East Front Street absent the ability to move all structures out of the flood prone area.
- Create a greenbelt loop and interconnecting greenspace along the Mohawk River incorporating Glenville/Scotia and Schenectady via the Riverside Park and ALCO site.
- Expand Riverside Park and create new public access on the river adjacent to East Front Street neighborhood in Schenectady.

5.0 Reconstruction Strategies, Projects, Programs and Actions

5.1 Projects, Strategies, and Programs

Strategies, projects, programs and actions are being developed to address the identified needs, opportunities and risks. These initiatives may be short-, medium-, or long-term in nature and will support the Community Vision of the NYRCR Plan. Applicable programs and projects will be developed with short-, medium-, and long-term goals, so residents can see and track progress over time. Part of the planning process includes developing actions that can be implemented immediately – this is important to the mission of the State to support rebuilding, while keeping the community engaged in progressing the program. Tables 5-1 and 5-2 represent preliminary projects identified by Committee Members. These projects and strategies will be further refined based on ideas and feedback collected from the public and during future committee and public meetings.

The City of Schenectady created a preliminary list of project ideas at the second committee meeting. This list is presented in Table 5-1. These project ideas remain to be vetted by a formal screening process.

Table 5-1 Preliminary projects for the City of Schenectady

Project Name	Location	Notes
Strategy 1: Improve emergency response		
Emergency Generator at SCCC for Critical Services	Warn Avenue SCCC Washington Ave. Campus	Relocate electrical system from the basement to a higher level
Strategy 2: Increase the resiliency of infrastructure towards flooding		
Overhaul and install a new drainage system	SCCC Parking lot and drainage at Washington Ave. Campus	Current system backs-up and floods the parking lot during a heavy rainfalls or a rise in the Mohawk River
WWTP Protection from 500 yr.	City Northside; Anthony Street	Hire Engineer to determine elevations and placement of berms Implement
North Ferry Street Pump Station		<ul style="list-style-type: none"> • Project includes elevating the pump station. • Finished with RFP to hire Engineering firm for design, engineer, bidding, and construction management of pump station. • Estimate of \$3.8 million includes contingency. \$1million budgeted. Need \$2.8 million.
SCCC elevate proposed parking garage		Facilities Master Plan
National Grid substation flood protection	Weaver St. and River Street	Awarded – new culvert tied into National Grid Work. \$750,000 in hand, needs council approval.
Strategy 3: Protect housing by flood proofing structures in flood prone zones		
Stockade Neighborhood (elevation, buyout, berming)		Development of expansion of River Park
Housing Stockade Study		<ol style="list-style-type: none"> 1) Elevation 2) Buyouts – demo/infill? Expand park 3) Adaption 4) Berm/Floodway
Housing EFS		Same as above; Examine berm to prevent flow from ALCO
Strategy 4: Protect water quality		
Greenbelt Loop and interconnecting green space along river		Glenville/Scotia – Schenectady Inc. Riverside and Alco site

Table 5-1 Preliminary projects for the City of Schenectady

Project Name	Location	Notes
Daylight Cowhorn Creek, Hans Groot Kill (College Creek), others	EFS SCCC ALCO storm water line	<ul style="list-style-type: none"> • Adequacy of infrastructure to handle high volume. Short duration storm; Daylight Creeks? Study- Schermerhorn Creek • Potential for green design/urban development; tied into general “sewer back up” issue • Need study and implementation
Well Heads	Rotterdam Aquifer	<ul style="list-style-type: none"> • Bids open for new backup generator next week. • Council approved berm around well heads. Clough Harbour gave 6 different alternatives. Based on their report we will hire them to install a 3 sided berm – bid documents, GC. \$ 500,000 anticipated, \$350,000 budgeted, need \$150,000 • CTMale did bid documents for backup generator on the street now. \$1 million budgeted.
Strategy 5: Improve river flow		
Canalway Study		1) Lock 7 – study of dam to determine if modifications can reduce flooding impacts upstream. 2) Washington Ave to Freeman’s Bridge – Pinch Point Study
River Flow Management		
Other:		
ALCO		Implement
Gateway Plaza Study		Implement
Erie Blvd./ SCCC area	West downtown	Redevelopment and opportunity Adaptive reuse
Greenbelt Development		
Substation Trans Line		Flood protection

The Town of Rotterdam prioritized their project list at the second committee meeting. This list of projects is consistent with and identified in Rotterdam Junction’s Draft Long-Term Community Recovery Plan (LTCRP) and provided in Table 5-2. The projects in Table 5-2 are not prioritized. A preliminary prioritized projects list is provided in Appendix D.

Table 5-2 Preliminary projects for the Town of Rotterdam

Project	Location	Notes
Strategy 1: Reduce flooding by improving draining systems		
Drainage Issue	Lock Street	Remove the pumps on Lock Street and replace them with a gravity drainage line that runs from Lock Street to Scrafford Lane to help eliminate flooding on Lock Street. The correction work would include the installation of catch basins, piping, pretreatment system and a culvert under the railroad track to drain the water into the area above and west end of the gravel pit.
Drainage Issue	Old Erie Canal	Reestablish the canal channel by removing sediment and debris from approximately 800 linear feet of canal to establish a narrow meandering channel to help standing water in the canal make its way to the river.
Drainage Issue	Railroad crossing at Scrafford Lane	Replace two culverts at the railroad crossing at Scrafford Lane. Ensure the sufficient size and elevation of each culvert. Replace the culvert at Mabie Lane.
Drainage Issue	Old Erie Canal	There are many unmaintained culverts in the drainage area in and around the old Erie Canal that caused severe drainage problems during the Irene event. Determine ownership via records, survey and tax map review. Establish easements for maintenance and repair access and establish maintenance schedule.
Drainage/Bike Trail Tunnel	Scrafford Lane	A grade separated tunnel is proposed as the best option to allow railroad and bike trail traffic at Scrafford Lane. A drainage component could also be engineered into this tunnel project.

Table 5-2 Preliminary projects for the Town of Rotterdam

Project	Location	Notes
Strategy 2: Increase the resiliency of infrastructure towards flooding		
Fire House Upgrade	Rotterdam Junction Fire District #1 Station	Install a generator at the Rotterdam Junction Fire District #1 Station to provide electricity to this facility in the event of a power outage. Additional disaster equipment is necessary to provide essential utilities and shelter for those in need. Handicap accessibility should also be added to this upgrade.
Sanitary Lift Stations	Five Critical Lift Stations	Install a permanent back-up generator at each of the five critical lift stations and purchase five portable generators.
District #3 Well	Rotterdam Junction - Town of Rotterdam District #3 well heads	Install an automatic transfer switch at the Rotterdam Junction - Town of Rotterdam District #3 well heads facility located on Main St. (Rt. 5S) to automatically start the generator in the event of a power outage to this facility.
Flood Protection	District #1 Rotterdam Junction Well	Provide a berm around the District #1 Rotterdam Junction Well Facility and provide sump pumps to remove precipitation and/or water that leaks onto the site.
District #5 Well	Rotterdam Water District #5	Drill a new well at the Rotterdam Water District #5 facility located on River Road. Include a flood containment berm around the proposed new well located in the flood plain along the Mohawk River.
Highway Construction	Route 5S	Establish redundant evacuation routes. Investigate the possibility of raising the grade on Route 5S at the southeasterly end of the hamlet where flooding occurs (near the intersection of the bike path).

Table 5-2 Preliminary projects for the Town of Rotterdam

Project	Location	Notes
Streetscape Improvements	Throughout Town	A streetscape project, which could include green infrastructure, should address poor sidewalk conditions, consolidation and elimination of curb cuts, street trees, pedestrian benches, and decorative lighting. Traffic calming measures should also be implemented.
High Capacity Pumps	Department of Public Works (DPW)	Purchase six high capacity diesel pumps, two of which will be trailer mounted for use by DPW to deploy to critical affected areas.
Community Project	Rotterdam Junction	Consider acquisition of a property in Rotterdam Junction that could impact the wellheads. This would provide protection for the two Rotterdam Junction well heads that are located directly behind the Young property.
Infrastructure Water Lines	Area between the Town of Rotterdam main water lines and the City of Schenectady main water lines	Investigate re-installing connection valves between the Town of Rotterdam main water lines and the City of Schenectady main water lines to provide for interconnection of water between the two municipalities if one of these municipalities require water supply during an emergency.
Infrastructure Water Lines	Area between the Rotterdam Junction District #3 wells with the wells the at SI Group facility.	Establish a connection between the Rotterdam Junction District #3 wells with the wells at the SI Group facility. Establish a connection between the Rotterdam District #5 wells on Rice Road and the SI Group and the District #3 well facility.
Strategy 3: Provide assistance to homeowners located in flood prone areas.		
Housing Buy-Back	Rotterdam Junction	Purchase homes located in Rotterdam Junction from homeowners not rebuilding or returning to their homes. Purchase demolished or sold homes for reoccupation and tax

Table 5-2 Preliminary projects for the Town of Rotterdam

Project	Location	Notes
		rolls. Ensure homes are rebuilt within Code.
Strategy 4: Improve emergency response		
Evacuation Plan	Town of Rotterdam	Work with Schenectady County to refine and improve the existing emergency response and evacuation plan to address lessons learned during Hurricane Irene and Tropical Storm Lee.
Training	Town of Rotterdam	Provide training to all code enforcement personnel and other appropriate Town personnel.
Senior Center	Rotterdam Senior Center	Install a generator at the Rotterdam Senior Center to provide electricity in the event of a power outage. This facility was used as an emergency shelter and meal site during the previous flood emergency.
Strategy 5: Increase opportunities for tourism		
Overlook Project	Old Erie Canal Lock #25	Encourage tourism and highlight the Town’s history and heritage by cleaning up and revitalizing the old Erie Canal Lock #25. An interpretative overlook should be created to provide for scenic views and a historical perspective of the lock. This could be incorporated into our high priority list.
River Waterfront Access	Mohawk River	Coordinate construction with the NYS Canal Corporation to provide trail heads and access points to the Mohawk River.

5.2 Project Prioritization

Projects will be selected based on the cost-benefit analysis. “Benefit” in this case includes the potential to mitigate risk (Section 3.1). The goal in project prioritization will be to reduce the outcome of the risk of flooding to the extent possible. Projects that mitigate risks that would have “Extreme” to “High” outcomes would rank highest. Another factor in prioritizing projects is the potential for projects to have co-benefits. For example, projects that stimulate economic growth, recreational opportunities, or improve the quality of life of residents would be prioritized over projects that share equal flood mitigation benefits but lack the co-benefits. Because of the many complex and subjective factors that enter the project prioritization, the final list will be thoroughly reviewed by the community as part of the public engagement process.

6.0 Implementation Strategy and Schedule

6.1 Regional Coordination Efforts

The City of Schenectady and the Town of Rotterdam is served by the following key regional entities and initiatives, and will communicate with representatives of each entity during the planning process for purposes of coordination, information sharing, and identification of available resources.

- The Mohawk River Watershed Coalition of Soil and Water Conservation Districts which is made up of 14 counties, including Schenectady County and encompassing the Town of Rotterdam and City of Schenectady, and is developing a Mohawk River Management Plan that aims to address issues in the Mohawk River Watershed.
- Schenectady County Multi-Jurisdictional All-Hazard Mitigation Plan
- Capital Region Economic Development Council, Strategic Plan
- New York State Canal Corporation

This section will be updated based on discussions with the public and Committee Members.

6.2 Local Coordination Efforts

The City of Schenectady and the Town of Rotterdam is served by the following key local entities and initiatives and will communicate with representatives of each entity during the planning process for purposes of coordination, information sharing, and identification of available resources.

The Schenectady Foundation is one example of a local entity carrying out community-related efforts that aim to assist flood-affected families. This foundation established The City of Schenectady County Rebuilding Families Fund with a seed grant of \$150,000. This fund was used by a coalition of organizations, the Flood Recovery Coalition, to voluntarily assist residents severely affected by Hurricane Irene and Tropical Storm Lee. The Flood Recovery Coalition for Schenectady County includes leaders from several key organizations such as Catholic Charities, City Mission of Schenectady, Habitat for Humanity, Schenectady Community Action Program (SCAP), The Schenectady Foundation, and congregations from St. Clare's, St. Margaret's and St. Ambrose Church. Coalition members provided specific resources and expertise needed to help flood-affected families to rebuild their homes and lives. Long-term flood recovery efforts have helped residents rebuild their homes and lives and will continue to do so after the next major storm.

This section will be updated based on discussions with the public and Committee Members.

6.3 Project Phasing

An implementation approach and schedule will be developed, phasing and implementing prioritized projects according to the results of the risk assessment, cost-benefit analysis, other community-specific factors, and forecasted availability of funding.

Phasing will be divided according to short-term (up to 1 year), medium-term (1 to 5 years), and long-term (longer than 5 years) scenarios.

6.4 Funding Resources

The community's plan will look beyond the CDBG funding currently available, and therefore will identify additional potential sources of funding through federal, state, local, and private sources. The committee, the NY Rising Community Reconstruction Program, and the Planning Firm will develop a list of funding sources based on the prioritized lists of strategies and projects.

7.0 Appendices

Appendix A: List of CR Planning Committee Members

Name	Title	Affiliation	Location
Quintin Bullock	Committee Co-Chair	President, SCCC	Schenectady
Thomas Yuille	Committee Co-Chair	BOA steering committee member and active in the Rotterdam Recreation Plan	Rotterdam
Gary R. McCarthy	Non-voting Committee Member	Mayor	Schenectady
Harry Buffardi	Non-voting Committee Member	Town of Rotterdam Supervisor	Rotterdam
Andrea Coppola	Committee Member	Rotterdam Junction Resident	Rotterdam
Chuck Steiner	Committee Member	President, Schenectady County Chamber	Regional
Clark Collins	Committee Member	Senior water operator town of Rotterdam	Rotterdam
Dave Mosher	Committee Member	Schenectady County SWCD Director, Chair of the Mohawk River Watershed Coalition	Schenectady County
James Duggan	Committee Member	Civil engineer, resident of Stockade	Schenectady
James Salengo	Committee Member	Downtown Schenectady Improvement Corporation	Schenectady
Jim Kalohn	Committee Member	Schenectady County Planning	Schenectady County
Joe Malatesta	Committee Member	Business Services Outsourcing Director at Computer Sciences Corporation, resident of Rotterdam Junction	Rotterdam
John Garver	Committee Member	Professor, Union College	Schenectady/ Glenville
Lisa Dufek	Committee Member	Resident of Rotterdam Junction	Rotterdam
Mary D'Alessandro-Gilmore	Committee Member	President of the Stockade Association	Schenectady- Stockade
Nathan Mandsager	Committee Member	Former Coordinator of the Flood Recovery Coalition (no longer an active organization)	Schenectady
Peter Comenzo	Committee Member	Town of Rotterdam Planner	Rotterdam
Renee Bradley	Committee Member	Resident	Schenectady
Richard Karp	Committee Member	LTCR steering committee member, Rotterdam Junction resident	Rotterdam
Robert Carreau	Committee Member	Executive Director, The Schenectady Foundation	Schenectady
Steve Strichman	Committee Member	City of Schenectady Planner, Director, Schenectady Land Bank	Schenectady

Appendix B: Draft Public Engagement Strategy

City of Schenectady and Town of Rotterdam Draft Public Engagement Strategy

Purpose: The City of Schenectady and Town of Rotterdam public engagement strategy has been developed to inform key stakeholders about the New York Rising Community Reconstruction planning process. The intent is to solicit public concerns, as well as educate the public, regarding severe weather events and flooding and to formalize opportunities for the public to provide input into strategies, programs and actions identified to mitigate the effects of flooding.

Preliminary Stakeholders Identified:

- Senior citizens,
- City of Schenectady and Town of Rotterdam residents,
- Stockade residents,
- East Front Street neighborhood residents,
- Rotterdam Junction residents,
- Red Cross,
- Child and Family Services.
- School Districts,
- Fire Departments, Emergency Response Organizations, Community Action Coalition,
- Town and City Highway Departments,
- County Soil and Water Conservation District,
- County Planning Office,
- County Highway Division,
- U.S. Fish and Wildlife Service

Strategy 1: Public Engagement Subcommittee

Purpose: The public engagement subcommittee will help guide the public engagement strategy and ensure appropriate outreach is undertaken to facilitate stakeholder input. The subcommittee will be responsible for determining outreach techniques, setting the date and location of future meetings, distributing flyers, and sending email notifications one to two weeks in advance of public meetings. It will also provide input on the public engagement strategy, and help determine the format for future public meetings. Members of the subcommittee include:

- Renee Bradley
- Nathan Mandsager
- Robert Carreau
- Peter Comenzo
- Thomas Yuille
- Mary D'Allessandro-Gilmore
- Lisa Dufek

Strategy 2: Public Meetings

Purpose: A minimum of four public outreach meetings will inform the public on the NYRCR planning process and obtain input from residents, business owners and other stakeholders regarding a community

vision, community needs and opportunities, and potential projects for implementation. A variety of techniques will be used to engage stakeholders and solicit input. For example, meetings in Schenectady will use an open forum format to inform stakeholders on the planning process and obtain input on project ideas. Since a thorough list of potential projects in Rotterdam was developed for other programs, meetings in Rotterdam will focus on prioritizing project ideas identified in previous planning processes.

Venue: Multiple meetings will be held in both Schenectady and Rotterdam. Each meeting will be inclusive of both communities. Potential venues include: Mabee Farms, Rotterdam Fire Hall, Blackbox Theater, and Schenectady County Community College. Immediate plans are to determine the availability of Mabee Farms for a meeting on November 4th.

Notification:

- Announcement in local newspapers two weeks prior to scheduled meeting: Gazette, The Spy.
- Announcement on local radio and TV stations.
- Announcement on NYRCR Website, Town of Rotterdam website.
- Announcement on Rotterdam Junction Firehouse roadside message sign.
- Emails to distribution lists available to committee members and partner organizations.
- Flyers posted in government buildings, libraries and other public bulletin boards.

Responsible Party: E & E will work with the public engagement subcommittee and NYSDOS to organize public meetings. E & E will place announcements in local newspapers. The subcommittee will send emails through distribution lists and distribute flyers to designated locations.

Schedule:

- 1st Public Meeting, September 30th, 7:00 p.m. to 9:00 p.m., Schenectady County Community College.
- 2nd Public Meeting, November 4th, 6:00 p.m. to 9:00 p.m., Mabee Farm, Rotterdam Junction.
- 3rd Public Meeting to solicit input into programs, projects, actions and strategies.
 - TBD
- 4th Public Meeting to present plan
 - TBD

Public Meeting Format:

Public Meeting #1: The first public meeting was held at the Schenectady County Community College. The purpose of this meeting was to solicit input from the public on the following topics:

- Program Overview
- Community Vision
- Geographic Scope
- Location of Recent Floodwaters
- Existing Community Plans
- Critical Assets

The format was similar to an open house with stations (tables) set up around the room. These tables covered the various aspects of the NY Rising Community Reconstruction program (listed above) and the planning progress as accomplished to date. The meeting opened with an introduction to the program followed by instructions on how to navigate the stations. Participants were given comment sheets on which they could document feedback during the event and then were invited to proceed around the room to seven different stations where they had the opportunity to learn about the planning topics and interact with planning committee members. A description of each station is provided below.

- Station 1: Welcome table with sign-in sheets, FAQ sheet, and sticky name badges for attendees.
- Station 2: Program Overview. Attendees were provided with a verbal description of the program, planning process, and project timeline. A map showed the study/geographical area.
- Station 3: Community Vision. A poster with a draft community vision was displayed with an opportunity for the public to write additional keywords or phrases.
- Station 4: Geographic Scope. A map was displayed for participants to provide input and their thoughts on the geographic scope.
- Station 5: Extent of Flooding Map- Mark the Waterline. The public delineated the distance to which flood waters extended during recent major storms on maps with municipal boundaries.
- Station 6: Existing Plans. Existing plans were identified on a poster for participants to add additional plans by documenting them on their comment sheets.
- Station 7: Community Assets. Two maps were displayed identifying the location of asset categories. Attendees suggested additional assets by documenting them on their comment sheets.

Strategy 3: Social Media

Purpose: To inform the public on NYRCR public meeting schedules and create an outlet for the public to comment on proposed strategies, programs and actions. Information and public discussion forums will be created on the NYRCR website.

Venue: Make full use of the feedback page on the NY Rising website.

Notification:

- Emails to distribution lists available to committee members and partner organizations.
- Website URL included on distributed flyers.
- Post link to feedback page on other community based websites.

Responsible Party: The Subcommittee will create and maintain a feedback page and create links to existing pages. E & E will work with subcommittee to develop content for the state NYRCR website. The subcommittee will send emails through distribution lists and distribute flyers to designated locations to inform stakeholders of social media tools.

Schedule: Beginning in October 2013 to at least April, 2014.

Strategy 4: Stories and Photos

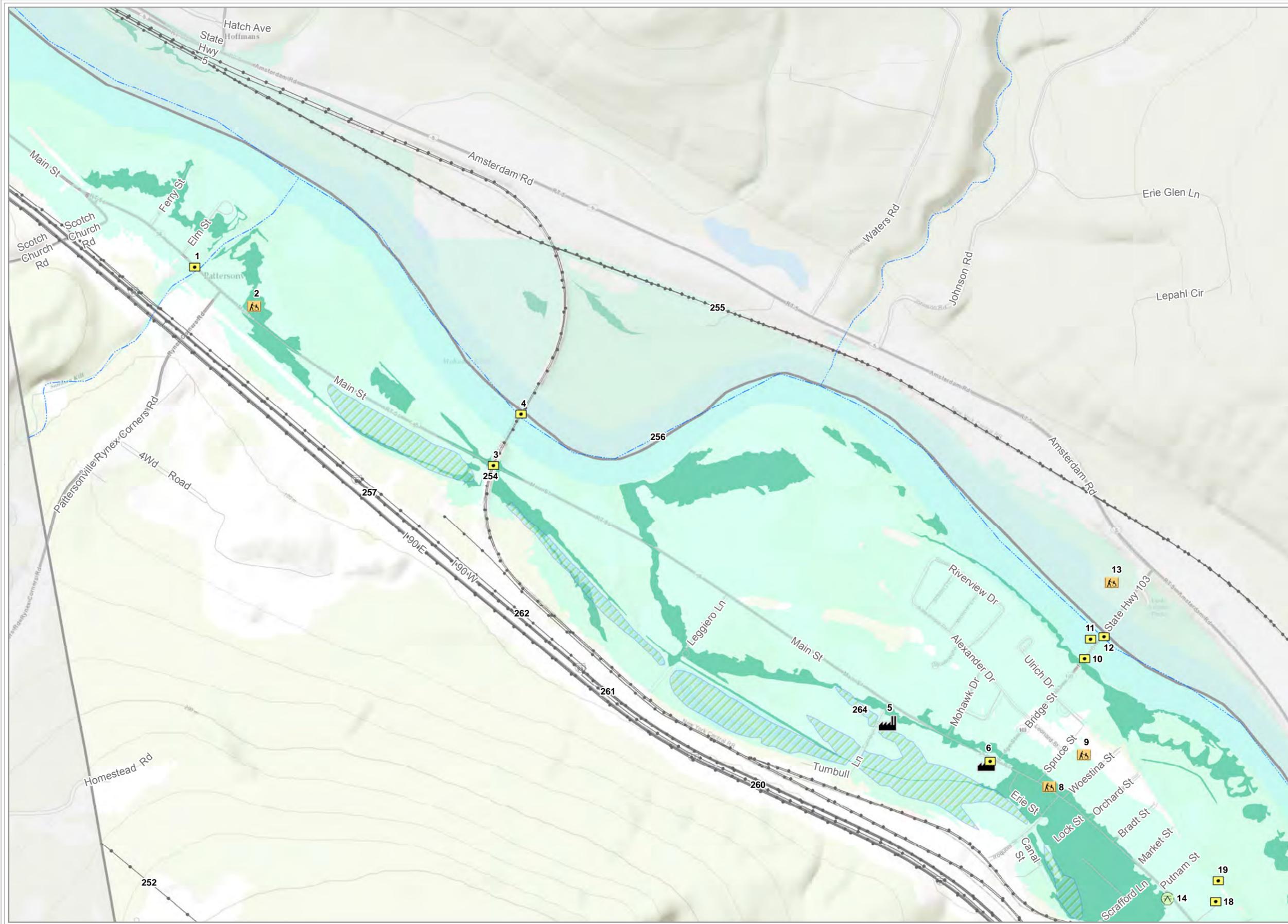
Purpose: To give the public an opportunity to provide information on personal experiences during recent storms. This strategy is under development. Ideas include:

- Provide information on public meeting flyers and advertisements that explain where public can drop off photos and stories.
- Provide an email address for the public to send their photos, videos and stories.
- Include a disclaimer that photos may be used on public documents.

Strategy 5: Attend Community Events

Purpose: NYSDOS program representatives and committee co-chairs and/or committee members attend neighborhood association and community group meetings to discuss the NY Rising program. For example, attend one of the Tuesday or Thursday senior luncheons at a church in Rotterdam Junction. NYSDOS has visited the East Front Street Neighborhood Association and will be going to the Stockade association meeting on November 14.

Appendix C: Draft Asset Inventory

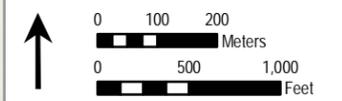


Community Assets Series

City of Schenectady and Town of Rotterdam

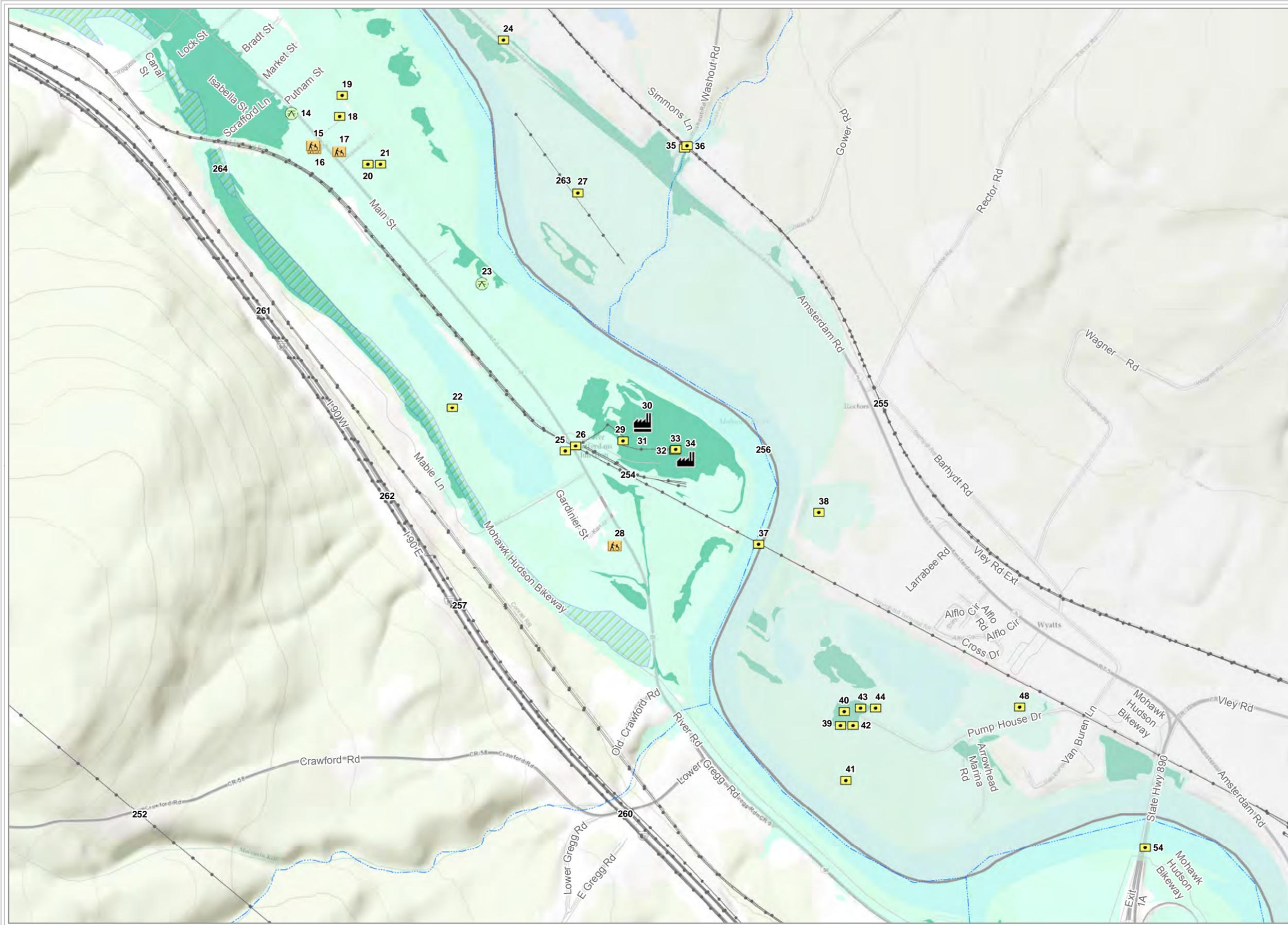
October 2013

- Assets Class**
- Economic
 - Health and Social Services
 - Infrastructure Systems
 - Natural and Cultural Resources
 - Infrastructure Systems Line
 - Natural and Cultural Resources Line
 - Natural and Cultural Resources Polygon
- 500-Year Flood Zone
- Study Area – 10-Foot Buffer of 500-Year Flood Zone



ESRI - World Topo Imagery
 NYS DOS, NYS DEC, NPS, NYS DOH,
 NYS ED, Platts, NYS DEC-FEMA Mohawk Flood
 Project - Assets



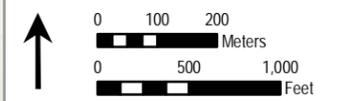


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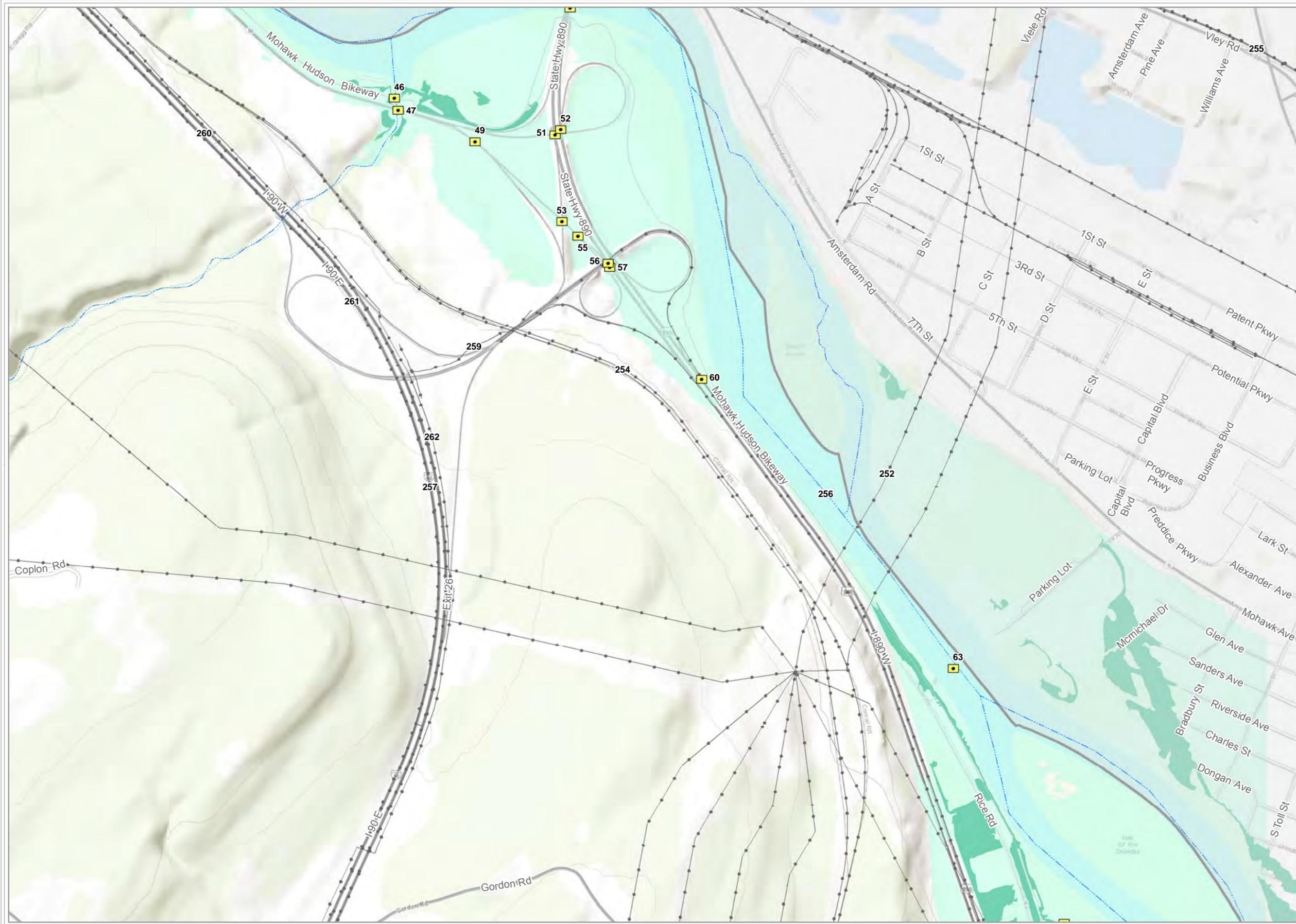
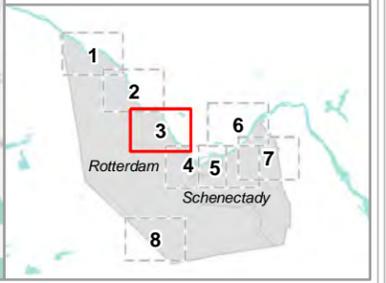
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Community Assets Series City of Schenectady and Town of Rotterdam

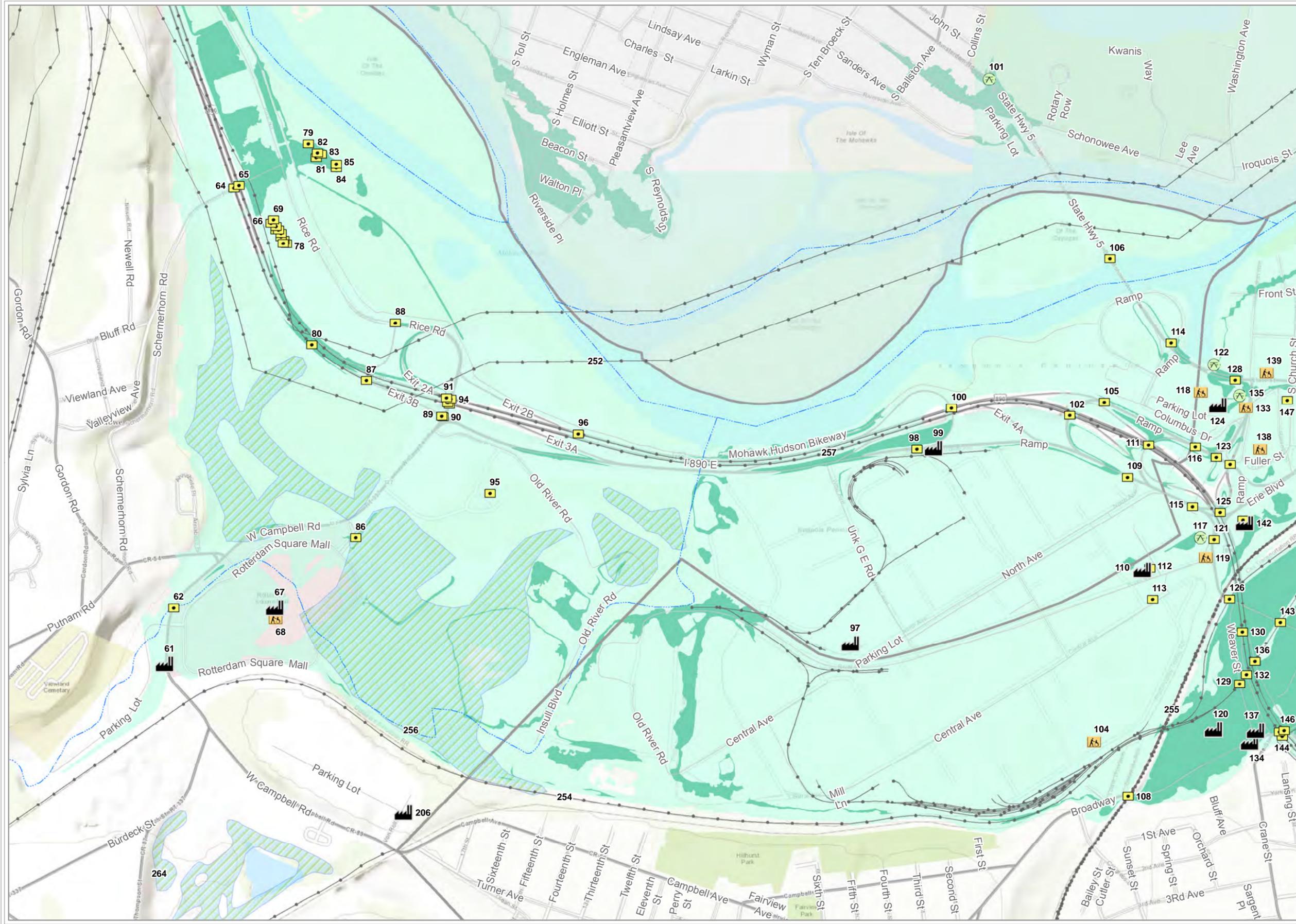
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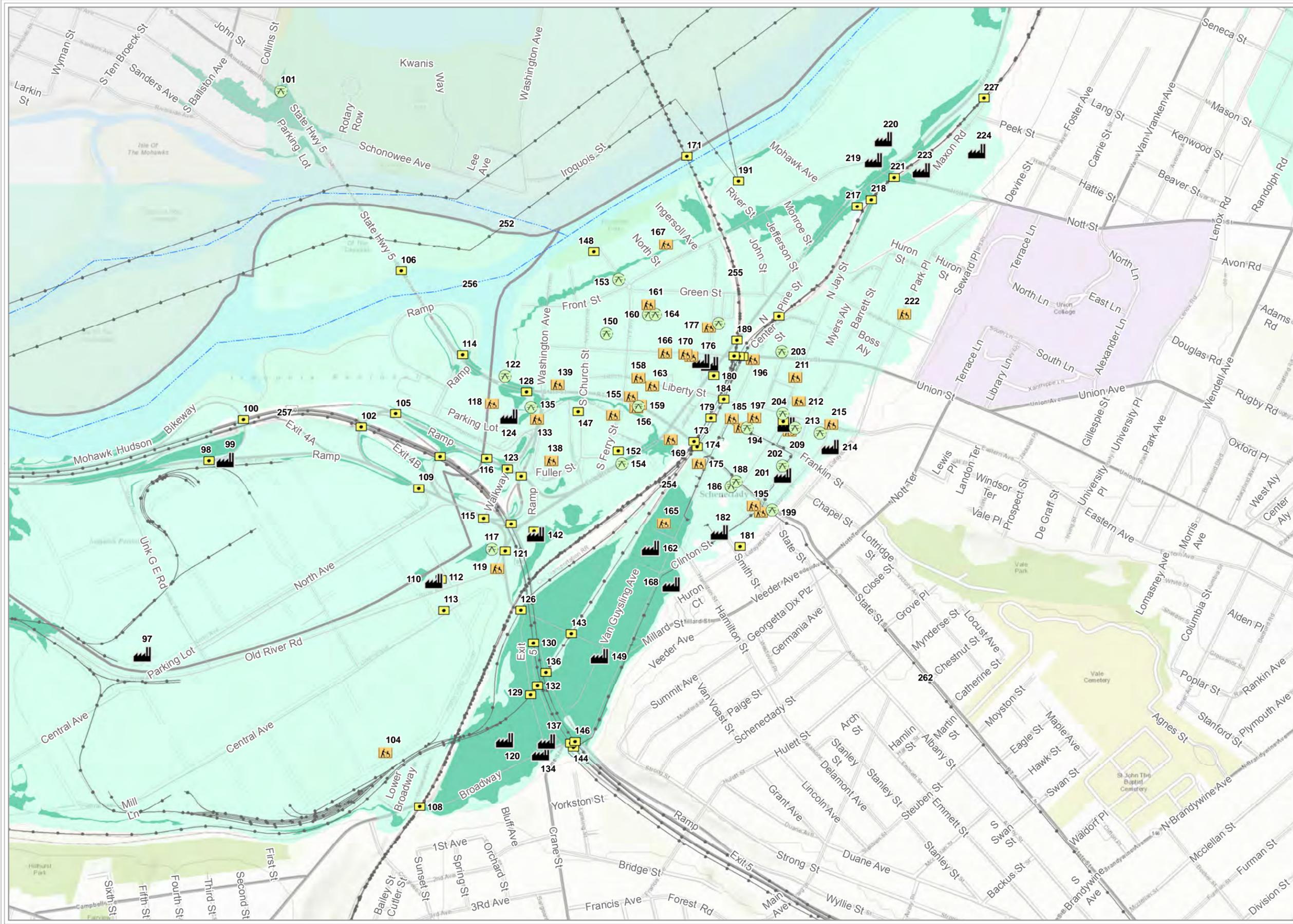
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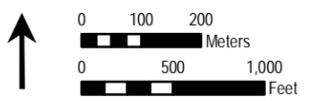


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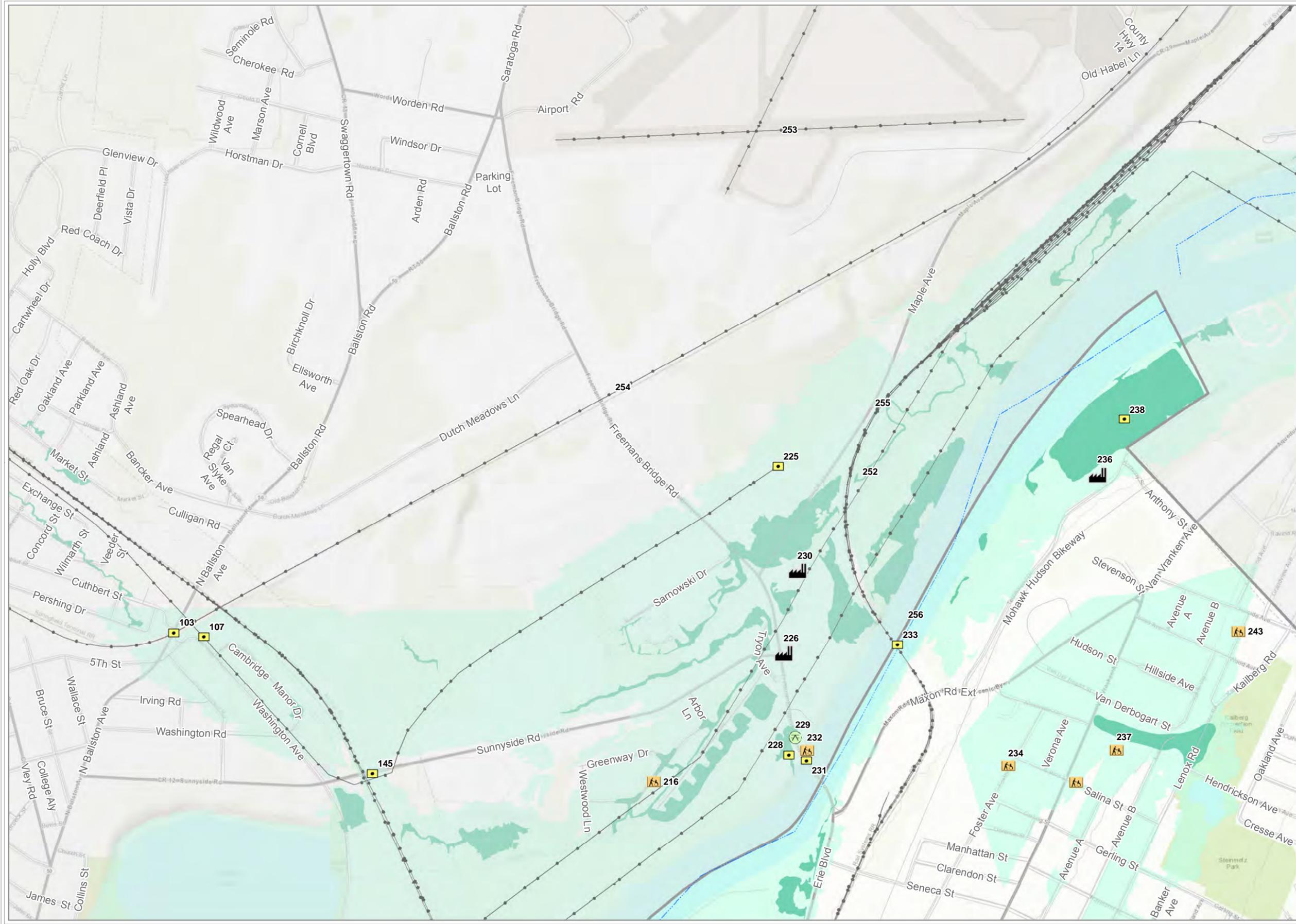
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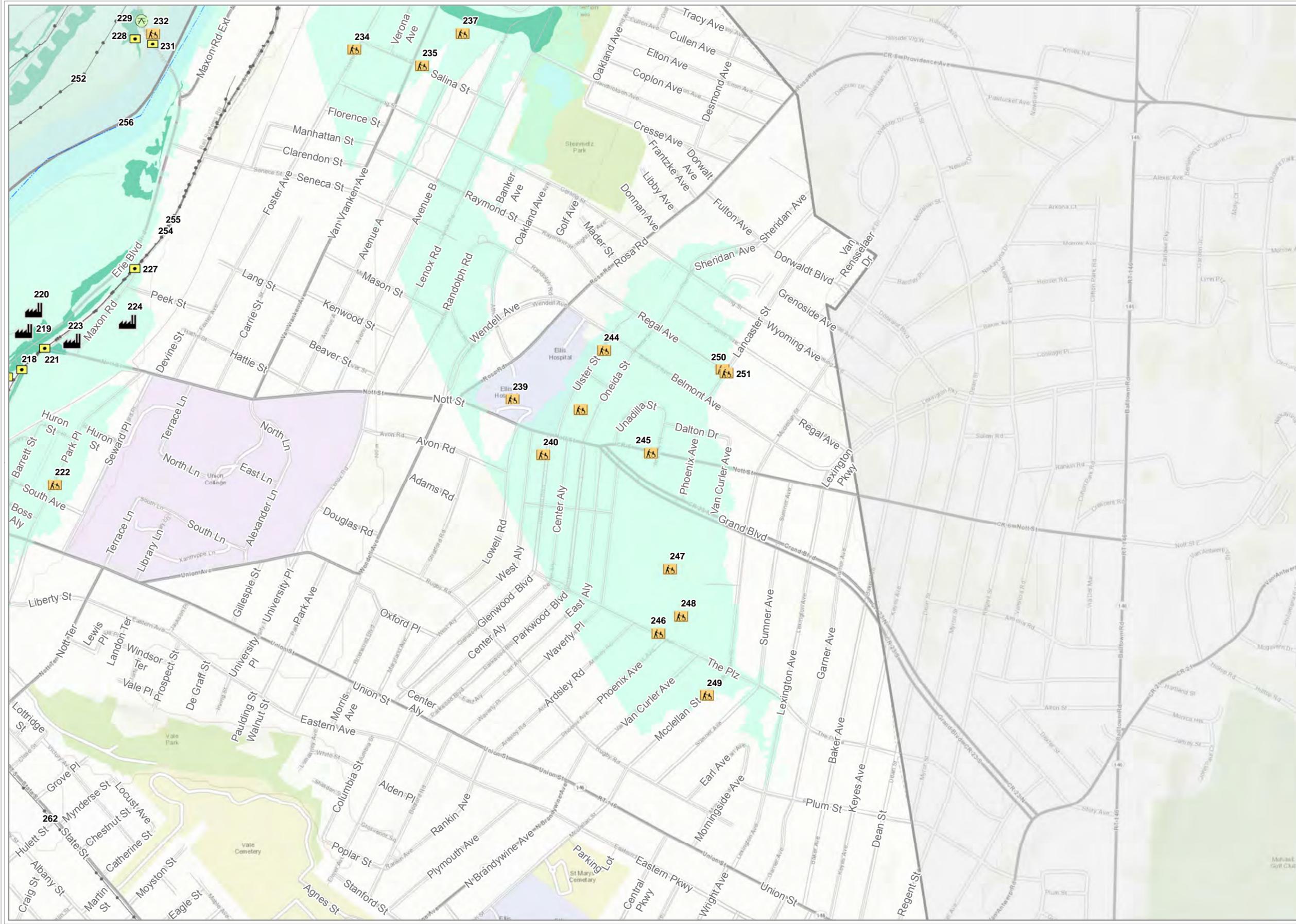
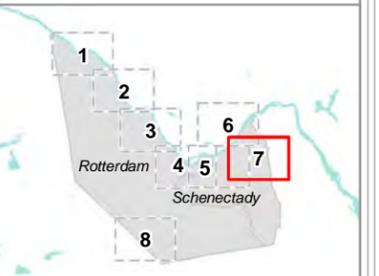
Assets Class

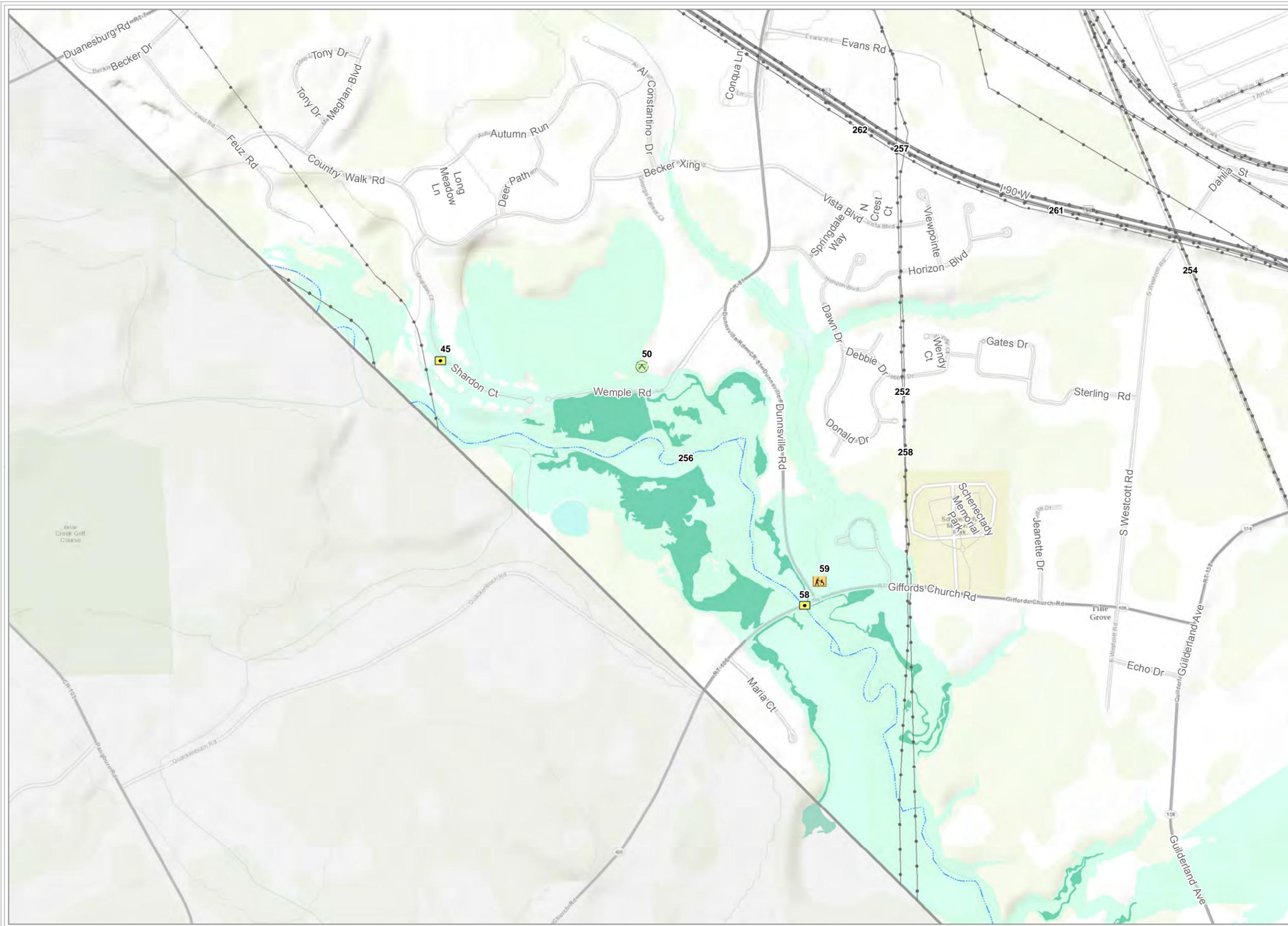
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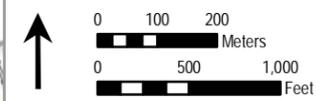


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UID (GIS Use Only)	Asset Name	Address	Latitude	Longitude	Risk Area	Asset Class	Subcategory	Socially Vulnerable Population	Critical Facility	Community Value
389	Bridge - Normans Kill	Town of Rotterdam	42.7639	-74.0016		Infrastructure Systems	Transportation			
393	Pine Grove Fire Station	Town of Rotterdam	42.7646	-74.0011		Health and Social Services	Government and Administrative Services			
2111	Dellemont-Wemple Farm	Town of Rotterdam	42.7709	-74.0080		Natural and Cultural Resources	Historic Landmarks and Facilities			
426	DEC Mine - Masick, Donald F	Town of Rotterdam	42.7711	-74.0160		Infrastructure Systems	Hazardous Materials, Solid Waste, and Recycling			
712	Bridge - Broadway	City of Schenectady	42.8032	-73.9542		Infrastructure Systems	Transportation			
729	EPlan Facility - Schenectady - Broadway Sc	City of Schenectady	42.8047	-73.9494		Economic	Industrial, Warehousing and Manufacturing			
728	OGS Building - Schenectady Hostel #2033	City of Schenectady	42.8048	-73.9555		Health and Social Services	Government and Administrative Services			
731	Highway Interchange - 38	City of Schenectady	42.8049	-73.9481		Infrastructure Systems	Transportation			
2197	Katherine Burr Blodgett Success Academy For Middle School Students	City of Schenectady	42.8050	-73.9484		Health and Social Services	Schools			
732	Bridge - Broadway	City of Schenectady	42.8050	-73.9482		Infrastructure Systems	Transportation			
734	Bridge - Erie Boulevard	City of Schenectady	42.8051	-73.9480		Infrastructure Systems	Transportation			
733	Chemical Sites RMP - 714 Broadway	City of Schenectady	42.8051	-73.9492		Economic	Industrial, Warehousing and Manufacturing			
735	Chemical Sites RMP - Nm - Broadway - Schenectady Mgp	City of Schenectady	42.8051	-73.9508		Economic	Industrial, Warehousing and Manufacturing			
750	Bridge - Weaver Street	City of Schenectady	42.8064	-73.9498		Infrastructure Systems	Transportation			
753	Bridge - Delaware and Hudson	City of Schenectady	42.8067	-73.9495		Infrastructure Systems	Transportation			
755	Bridge - Vacant Land	City of Schenectady	42.8071	-73.9492		Infrastructure Systems	Transportation			

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754	EPlan Facility - Bj'S Wholesale Club (0079)	Town of Rotterdam	42.8072	-73.9923		Economic	Industrial, Warehousing and Manufacturing			
758	EPlan Facility - Capiello Schenectady	City of Schenectady	42.8075	-73.9470		Economic	Industrial, Warehousing and Manufacturing			
757	Chemical Sites RMP - G.E. Main Plant	Town of Rotterdam	42.8077	-73.9652		Economic	Industrial, Warehousing and Manufacturing			
765	Highway Interchange - 798817	City of Schenectady	42.8079	-73.9497		Infrastructure Systems	Transportation			
768	Bridge - Edison Avenue	City of Schenectady	42.8082	-73.9481		Infrastructure Systems	Transportation			
767	Post Office - Rotterdam Square Branch	Town of Rotterdam	42.8085	-73.9879		Health and Social Services	Government and Administrative Services			
2205	Rotterdam Square Mall	Town of Rotterdam	42.8088	-73.9879		Economic	Large Business			
769	Bridge - Poentic Kill	Town of Rotterdam	42.8088	-73.9919		Infrastructure Systems	Transportation			
771	Bridge - Edison Avenue	City of Schenectady	42.8089	-73.9502		Infrastructure Systems	Transportation			
770	Microwave Tower - Ge Mds Llc	City of Schenectady	42.8089	-73.9532		Infrastructure Systems	Telecommunications			
778	Chemical Sites RMP - Nm - Clinton Ave - Schenectady Mgp	City of Schenectady	42.8096	-73.9442		Economic	Industrial, Warehousing and Manufacturing			
2206	GE Main Plant	City of Schenectady	42.8098	-73.9536		Economic	Large Business			
779	Microwave Tower - Mpx	City of Schenectady	42.8098	-73.9533		Infrastructure Systems	Telecommunications			
780	Shelter - Livingston National Guard Armory	City of Schenectady	42.8101	-73.9511		Health and Social Services	Emergency Operations / Response			
785	Bridge - Edison Ave	City of Schenectady	42.8106	-73.9507		Infrastructure Systems	Transportation			
2211	General Electric Research Laboratory	City of Schenectady	42.8107	-73.9513		Natural and Cultural Resources	Historic Landmarks and Facilities			
786	Chemical Sites RMP - 312 Broadway Site	City of Schenectady	42.8107	-73.9450		Economic	Industrial, Warehousing and Manufacturing			
2212	Rotterdam Square Impoundment Dam	Town of Rotterdam	42.8108	-73.9847		Infrastructure Systems	Navigable Waterway Facilities			

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795	Chemical Sites RMP - 314 Clinton Street Site	City of Schenectady	42.8111	-73.9423		Economic	Industrial, Warehousing and Manufacturing			
796	Radiological Storage Facility - Professional Service Industries, Inc.	City of Schenectady	42.8112	-73.9496		Infrastructure Systems	Hazardous Materials, Solid Waste, and Recycling		Y	
801	NYS Office for People With Developmental Disabilities - 1174 McClellan St. Ira	City of Schenectady	42.8112	-73.9091		Health and Social Services	Disabled	Y		
2216	Educational Opportunity Center	City of Schenectady	42.8114	-73.9444		Health and Social Services	Schools			
799	Microwave Tower - Capital District Regional Off Track Betting Corporation	City of Schenectady	42.8114	-73.9423		Infrastructure Systems	Telecommunications			
798	Highway Interchange - 37	City of Schenectady	42.8114	-73.9505		Infrastructure Systems	Transportation			
800	Bridge - 890I X	City of Schenectady	42.8116	-73.9516		Infrastructure Systems	Transportation			
802	DOH Extension Clinic - Eddy Cohoes Rehabilitation Center@Eddy Seniorcare	City of Schenectady	42.8117	-73.9406		Health and Social Services	Healthcare Facilities			
2220	Foster Building	City of Schenectady	42.8118	-73.9401		Natural and Cultural Resources	Historic Landmarks and Facilities			
806	Shelter - First Baptist Church	City of Schenectady	42.8119	-73.9409		Health and Social Services	Emergency Operations / Response			
805	FCC Antenna - Sba Properties, Inc.	Town of Rotterdam	42.8121	-73.9794		Infrastructure Systems	Telecommunications			
810	Commercial Lab - Professional Service Industries Inc	City of Schenectady	42.8123	-73.9482		Economic	Industrial, Warehousing and Manufacturing			
813	Proctor'S Theatre	City of Schenectady	42.8125	-73.9418		Natural and Cultural Resources	Museums, Performing Arts Centers, and Stadiums			
811	Highway Interchange - 58263991	Town of Rotterdam	42.8125	-73.9542		Infrastructure Systems	Transportation			

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2222	Proctor, F. F., Theatre and Arcade	City of Schenectady	42.8126	-73.9416		Natural and Cultural Resources	Historic Landmarks and Facilities			
816	EPlan Facility - Verizon Co (Ny51200)	City of Schenectady	42.8128	-73.9397		Economic	Industrial, Warehousing and Manufacturing			
815	Bridge - Big Circle	City of Schenectady	42.8128	-73.9501		Infrastructure Systems	Transportation			
2227	Schenectady High School	City of Schenectady	42.8130	-73.9110		Health and Social Services	Schools			
817	Bridge - Big Circle	City of Schenectady	42.8130	-73.9506		Infrastructure Systems	Transportation			
2224	Friedens United Church of Christ	City of Schenectady	42.8131	-73.9397		Natural and Cultural Resources	Cultural or Religious Establishments			
821	State Owned Property - DOT Building (Schenectady)	City of Schenectady	42.8131	-73.9430		Health and Social Services	Government and Administrative Services			
2225	Schenectady Armory	City of Schenectady	42.8131	-73.9491		Natural and Cultural Resources	Historic Landmarks and Facilities			
2226	Central Fire Station	City of Schenectady	42.8132	-73.9461		Natural and Cultural Resources	Historic Landmarks and Facilities			
824	State Owned Property - State Armory-Schenectady	City of Schenectady	42.8132	-73.9489		Health and Social Services	Government and Administrative Services			
823	Highway Interchange - 59012281	Town of Rotterdam	42.8133	-73.9625		Infrastructure Systems	Transportation			
828	Highway Interchange - 58263997	City of Schenectady	42.8133	-73.9515		Infrastructure Systems	Transportation			
2228	General Electric	Town of Rotterdam	42.8133	-73.9618		Economic	Large Business			
829	Bridge - Little Circle D	Town of Rotterdam	42.8134	-73.9533		Infrastructure Systems	Transportation			
2230	Schenectady High School	City of Schenectady	42.8135	-73.9101		Health and Social Services	Schools			
2229	South Ferry Street Sanitary Sewer Pump Station	City of Schenectady	42.8135	-73.9462		Infrastructure Systems	Wastewater			

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835	Chemical Sites RMP - Kaiser Permanente Schenectady Health Cen	City of Schenectady	42.8136	-73.9378		Economic	Industrial, Warehousing and Manufacturing			
834	Bridge - S H 5 (State St)	City of Schenectady	42.8136	-73.9431		Infrastructure Systems	Transportation			
2231	State St and Broadway - Downtown/Train Station	City of Schenectady	42.8138	-73.9432		Infrastructure Systems	Transportation			
831	Highway Interchange - 823735	Town of Rotterdam	42.8138	-73.9759		Infrastructure Systems	Transportation			
838	Chemical Dependence Treatment Program - New Choices Recovery Center	City of Schenectady	42.8138	-73.9441		Health and Social Services	Healthcare Facilities	Y		
2232	Hellenic Orthodox Church of Saint George	City of Schenectady	42.8139	-73.9383		Natural and Cultural Resources	Cultural or Religious Establishments			
844	Municipal Hall - Munihl-781	City of Schenectady	42.8141	-73.9394		Health and Social Services	Government and Administrative Services			
2236	Schenectady City Hall and Post Office	City of Schenectady	42.8141	-73.9392		Natural and Cultural Resources	Historic Landmarks and Facilities			
848	NYS Office for People With Developmental Disabilities - 10 Mill Lane #316	City of Schenectady	42.8142	-73.9414		Health and Social Services	Disabled	Y		
2237	Saint John The Baptist Roman Catholic Church	City of Schenectady	42.8142	-73.9411		Natural and Cultural Resources	Cultural or Religious Establishments			
857	Fire Resource Equipment - County Of Schenectady	City of Schenectady	42.8142	-73.9378		Health and Social Services	Emergency Operations / Response			
851	EPlan Facility - Von Roll Usa, Inc.	City of Schenectady	42.8142	-73.9396		Economic	Industrial, Warehousing and Manufacturing			
853	EPlan Facility - Fedex Freight Inc - Alb	City of Schenectady	42.8142	-73.9396		Economic	Industrial, Warehousing and Manufacturing			
854	EPlan Facility - GE Rotterdam Tooling Center	City of Schenectady	42.8142	-73.9396		Economic	Industrial, Warehousing and Manufacturing			
847	Bridge - Big Circle	Town of Rotterdam	42.8143	-73.9564		Infrastructure Systems	Transportation			

UID (GIS Use Only)	Asset Name	Address	Latitude	Longitude	Risk Area	Asset Class	Subcategory	Socially Vulnerable Population	Critical Facility	Community Value
858	NYS Office for People With Developmental Disabilities - Individual Support Services	City of Schenectady	42.8143	-73.9418		Health and Social Services	Disabled	Y		
840	Highway Interchange - 58263988	Town of Rotterdam	42.8143	-73.9812		Infrastructure Systems	Transportation			
861	Radiological Storage Facility - City Of Schenectady Building Department	City of Schenectady	42.8143	-73.9397		Infrastructure Systems	Hazardous Materials, Solid Waste, and Recycling		Y	
841	Highway Interchange - 58263989	Town of Rotterdam	42.8144	-73.9813		Infrastructure Systems	Transportation			
2240	Schenectady County Community College	City of Schenectady	42.8144	-73.9494		Health and Social Services	Schools			
2241	Saint John The Baptist Parochial School	City of Schenectady	42.8144	-73.9408		Health and Social Services	Schools			
2242	Amtrak Schenectady Station	City of Schenectady	42.8145	-73.9425		Infrastructure Systems	Transportation			
859	Bridge - Ramp F Struct B	Town of Rotterdam	42.8145	-73.9611		Infrastructure Systems	Transportation			
2243	Schenectady Community College	City of Schenectady	42.8145	-73.9506		Economic	Large Business			
865	NYS Office for People With Developmental Disabilities - 10 Mill Ln #103	City of Schenectady	42.8145	-73.9464		Health and Social Services	Disabled	Y		
2244	US Post Office-- Schenectady	City of Schenectady	42.8146	-73.9397		Natural and Cultural Resources	Historic Landmarks and Facilities			
866	Highway Interchange - 58263994	Town of Rotterdam	42.8146	-73.9551		Infrastructure Systems	Transportation			
871	Travel Center - Bus Station	City of Schenectady	42.8147	-73.9478		Infrastructure Systems	Transportation			
860	Bridge - Campbell Road	Town of Rotterdam	42.8147	-73.9810		Infrastructure Systems	Transportation			
863	Highway Interchange - 34	Town of Rotterdam	42.8147	-73.9810		Infrastructure Systems	Transportation			

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874	NYS Office for People With Developmental Disabilities - Spilot_0260_Semp	City of Schenectady	42.8147	-73.9455		Health and Social Services	Disabled	Y		
2246	Hotel Van Curler	City of Schenectady	42.8148	-73.9492		Natural and Cultural Resources	Historic Landmarks and Facilities			
2247	Barney, H. S., Building	City of Schenectady	42.8148	-73.9454		Natural and Cultural Resources	Historic Landmarks and Facilities			
879	NYS Office for People With Developmental Disabilities - 225 State St., Apt. 572	City of Schenectady	42.8148	-73.9454		Health and Social Services	Disabled	Y		
864	Bridge - Campbell Road	Town of Rotterdam	42.8148	-73.9809		Infrastructure Systems	Transportation			
882	NYS Office for People With Developmental Disabilities - Service Coordination	City of Schenectady	42.8149	-73.9457		Health and Social Services	Disabled	Y		
886	Shelter - Schenectady High School	City of Schenectady	42.8149	-73.9105		Health and Social Services	Emergency Operations / Response			
867	Highway Interchange - 743860	Town of Rotterdam	42.8149	-73.9811		Infrastructure Systems	Transportation			
881	Schenectady County Community College	City of Schenectady	42.8149	-73.9512		Health and Social Services	Higher Education Institutions			
883	Post Office - Schenectady	City of Schenectady	42.8149	-73.9391		Health and Social Services	Government and Administrative Services			
884	Bridge - Liberty Street	City of Schenectady	42.8150	-73.9420		Infrastructure Systems	Transportation			
887	Bridge - 5 5 16132001	City of Schenectady	42.8153	-73.9499		Infrastructure Systems	Transportation			
890	NYS Office for People With Developmental Disabilities - 214 Liberty St.#336	City of Schenectady	42.8154	-73.9449		Health and Social Services	Disabled	Y		
885	Highway Interchange - 421615	Town of Rotterdam	42.8154	-73.9843		Infrastructure Systems	Transportation			
2248	YMCA	City of Schenectady	42.8155	-73.9486		Health and Social Services	Daycare and Eldercare	Y		

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902	NYS Office for People With Developmental Disabilities - Individual Support Services	City of Schenectady	42.8156	-73.9392		Health and Social Services	Disabled	Y		
893	NYS Office for People With Developmental Disabilities - 211 Liberty St #212	City of Schenectady	42.8156	-73.9454		Health and Social Services	Disabled	Y		
2251	Amtrak Station-SDY	City of Schenectady	42.8157	-73.9424		Infrastructure Systems	Transportation			
2250	Stockade Historic District (Boundary Increase)	City of Schenectady	42.8157	-73.9507		Natural and Cultural Resources	Historic Landmarks and Facilities			
904	Chemical Sites RMP - Former Ladd'S Gas Station	City of Schenectady	42.8160	-73.9426		Economic	Industrial, Warehousing and Manufacturing			
907	Chemical Sites RMP - Gillette House Properties	City of Schenectady	42.8161	-73.9429		Economic	Industrial, Warehousing and Manufacturing			
908	VLU Headquarters - State Police Station	City of Schenectady	42.8162	-73.9409		Health and Social Services	Emergency Operations / Response			
914	Bridge - Union Street	City of Schenectady	42.8162	-73.9413		Infrastructure Systems	Transportation			
917	Bridge - Union Street	City of Schenectady	42.8163	-73.9414		Infrastructure Systems	Transportation			
910	NYS Office for People With Developmental Disabilities - Reimb/Crisis	City of Schenectady	42.8163	-73.9433		Health and Social Services	Disabled	Y		
918	Bridge - Union Street	City of Schenectady	42.8163	-73.9416		Infrastructure Systems	Transportation			
920	NYS Office for People With Developmental Disabilities - Family Reimbursement/Goods	City of Schenectady	42.8163	-73.9436		Health and Social Services	Disabled	Y		
916	Highway Interchange - 33	Town of Rotterdam	42.8164	-73.9524		Infrastructure Systems	Transportation			
921	NYS Office for People With Developmental Disabilities - Recreation Reimbursement	City of Schenectady	42.8164	-73.9444		Health and Social Services	Disabled	Y		

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2252	Friendship Baptist Church	City of Schenectady	42.8164	-73.9397		Natural and Cultural Resources	Cultural or Religious Establishments			
906	Bridge - Schdy Water Lines	Town of Rotterdam	42.8165	-73.9864		Infrastructure Systems	Transportation			
926	Bridge - Erie Boulevard	City of Schenectady	42.8167	-73.9415		Infrastructure Systems	Transportation			
2256	First Reformed Church	City of Schenectady	42.8169	-73.9467		Natural and Cultural Resources	Cultural or Religious Establishments			
925	Highway Interchange - 58263987	Town of Rotterdam	42.8171	-73.9831		Infrastructure Systems	Transportation			
929	NYS Office for People With Developmental Disabilities - 13 N College St, Stockade E	City of Schenectady	42.8171	-73.9426		Health and Social Services	Disabled	Y		
2259	Holy Cross Roman Catholic Church	City of Schenectady	42.8172	-73.9422		Natural and Cultural Resources	Cultural or Religious Establishments			
931	Bridge - Pine Street	City of Schenectady	42.8174	-73.9398		Infrastructure Systems	Transportation			
2263	Schenectady City School District	City of Schenectady	42.8175	-73.9348		Health and Social Services	Schools			
2261	Saint George Episcopal Church	City of Schenectady	42.8175	-73.9450		Natural and Cultural Resources	Cultural or Religious Establishments			
2262	First Presbyterian Church	City of Schenectady	42.8175	-73.9447		Natural and Cultural Resources	Cultural or Religious Establishments			
2264	Saint George Church School	City of Schenectady	42.8178	-73.9450		Health and Social Services	Schools			
940	NYS Office for People With Developmental Disabilities - 1443 Glenwood Boulevard	City of Schenectady	42.8182	-73.9155		Health and Social Services	Disabled	Y		
941	NYS Office for People With Developmental Disabilities - Agency Placeholder	City of Schenectady	42.8183	-73.9112		Health and Social Services	Disabled	Y		

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2265	Stockade Historic District	City of Schenectady	42.8185	-73.9462		Natural and Cultural Resources	Historic Landmarks and Facilities			
943	Bridge - Ramp-Sccc Parking	Town of Rotterdam	42.8188	-73.9548		Infrastructure Systems	Transportation			
2268	North Ferry Street Sanitary Sewer Pump Station	City of Schenectady	42.8193	-73.9472		Infrastructure Systems	Wastewater			
945	DOH Drinking Water Well - Schenectady City Water Works	Town of Rotterdam	42.8194	-73.9874		Infrastructure Systems	Water Supply			
2267	Schenectady City Wells	Town of Rotterdam	42.8194	-73.9875		Infrastructure Systems	Water Supply			
946	DOH Drinking Water Well - Schenectady City Water Works	Town of Rotterdam	42.8195	-73.9875		Infrastructure Systems	Water Supply			
958	Shelter - Oneida Middle School	City of Schenectady	42.8195	-73.9140		Health and Social Services	Emergency Operations / Response			
2269	Riverside School (historical)	City of Schenectady	42.8195	-73.9443		Health and Social Services	Schools			
2270	Oneida Middle School	City of Schenectady	42.8195	-73.9140		Health and Social Services	Schools			
947	DOH Drinking Water Well - Schenectady City Water Works	Town of Rotterdam	42.8196	-73.9876		Infrastructure Systems	Water Supply			
948	DOH Drinking Water Well - Schenectady City Water Works	Town of Rotterdam	42.8197	-73.9876		Infrastructure Systems	Water Supply			
950	DOH Drinking Water Well - Schenectady City Water Works	Town of Rotterdam	42.8198	-73.9878		Infrastructure Systems	Water Supply			
951	DOH Drinking Water Treatment Plant - Schenectady City Water Works	Town of Rotterdam	42.8198	-73.9878		Infrastructure Systems	Water Supply			
952	DOH Drinking Water Well - Schenectady City Water Works	Town of Rotterdam	42.8198	-73.9877		Infrastructure Systems	Water Supply			
962	Ellis Hospital	City of Schenectady	42.8198	-73.9167		Health and Social Services	Healthcare Facilities		Y	

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953	DOH Drinking Water Well - Schenectady City Water Works	Town of Rotterdam	42.8199	-73.9878		Infrastructure Systems	Water Supply			
954	DOH Drinking Water Well - Schenectady City Water Works	Town of Rotterdam	42.8200	-73.9880		Infrastructure Systems	Water Supply			
957	DOH Drinking Water Well - Schenectady City Water Works	Town of Rotterdam	42.8201	-73.9879		Infrastructure Systems	Water Supply			
2274	Jessie T Zoller School	City of Schenectady	42.8206	-73.9082		Health and Social Services	Schools			
972	Microwave Tower - Ellis Hospital	City of Schenectady	42.8206	-73.9367		Infrastructure Systems	Telecommunications			
980	NYS Office for People With Developmental Disabilities - 1319/1321 Regal Ave. Ira	City of Schenectady	42.8207	-73.9084		Health and Social Services	Disabled	Y		
979	Bridge - North Jay Street	City of Schenectady	42.8208	-73.9361		Infrastructure Systems	Transportation			
970	Bridge - Schermerhorn Road	Town of Rotterdam	42.8210	-73.9895		Infrastructure Systems	Transportation			
974	Bridge - Schermerhorn Road	Town of Rotterdam	42.8211	-73.9893		Infrastructure Systems	Transportation			
987	NYS Office for People With Developmental Disabilities - 1770 Ulster St	City of Schenectady	42.8213	-73.9131		Health and Social Services	Disabled	Y		
2275	Electrical Substation - Front Street	City of Schenectady	42.8214	-73.9414		Infrastructure Systems	Power Supply		Y	
985	Bridge - Nott Street	City of Schenectady	42.8214	-73.9352		Infrastructure Systems	Transportation			
981	DOH Drinking Water Well - Rotterdam Wd #5	Town of Rotterdam	42.8216	-73.9854		Infrastructure Systems	Water Supply			
990	Chemical Sites RMP - Nott Street Industrial Park	City of Schenectady	42.8216	-73.9341		Economic	Industrial, Warehousing and Manufacturing			
982	DOH Drinking Water Well - Rotterdam Wd #5	Town of Rotterdam	42.8217	-73.9854		Infrastructure Systems	Water Supply			

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986	DOH Drinking Water Treatment Plant - Rotterdam Wd #5	Town of Rotterdam	42.8219	-73.9862		Infrastructure Systems	Water Supply			
992	Chemical Sites RMP - Nott Street Industrial Park	City of Schenectady	42.8219	-73.9360		Economic	Industrial, Warehousing and Manufacturing			
988	DOH Drinking Water Well - Rotterdam Wd #5	Town of Rotterdam	42.8220	-73.9860		Infrastructure Systems	Water Supply			
2276	Rotterdam Wells	Town of Rotterdam	42.8220	-73.9861		Infrastructure Systems	Water Supply			
994	Bridge - Erie Canal	City of Schenectady	42.8221	-73.9434		Infrastructure Systems	Transportation			
996	Chemical Sites RMP - College Park	City of Schenectady	42.8222	-73.9319		Economic	Industrial, Warehousing and Manufacturing			
991	DOH Drinking Water Well - Rotterdam Wd #5	Town of Rotterdam	42.8223	-73.9865		Infrastructure Systems	Water Supply			
2277	Not Street Industrial Park	City of Schenectady	42.8225	-73.9356		Economic	Large Business			
1001	Bridge - Maxon Road	City of Schenectady	42.8237	-73.9316		Infrastructure Systems	Transportation			
2281	Abraham Glen House	Village of Scotia	42.8241	-73.9595		Natural and Cultural Resources	Historic Landmarks and Facilities			
2301	Yates School	City of Schenectady	42.8296	-73.9202		Health and Social Services	Schools			
1919	NYS Office For People With Developmental Disabilities - 17 Havenbrook Dr	Town of Glenville	42.8297	-73.9369		Health and Social Services	Disabled	Y		
2296	Lock E-8 Dam At Scotia	Town of Rotterdam	42.8297	-73.9908		Infrastructure Systems	Navigable Waterway Facilities			
1921	Bridge - Amtrak	Village of Scotia	42.8300	-73.9481		Infrastructure Systems	Transportation			
1016	NYS Office for People With Developmental Disabilities - 2077-Foster Ave. - Ira	City of Schenectady	42.8301	-73.9229		Health and Social Services	Disabled	Y		
1922	Bridge - Mohawk R/Erie Can	Town of Glenville	42.8303	-73.9309		Infrastructure Systems	Transportation			

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2304	Town of Glenville Sewage Lift Station	Town of Glenville	42.8304	-73.9316		Infrastructure Systems	Wastewater			
1017	Shelter - Yates Magnet Elementary School	City of Schenectady	42.8305	-73.9186		Health and Social Services	Emergency Operations / Response			
1923	NOAA River Guage - SCHN6	Town of Glenville	42.8306	-73.9308		Health and Social Services	Emergency Operations / Response			
2305	Seeley Farmhouse	Town of Glenville	42.8309	-73.9313		Natural and Cultural Resources	Historic Landmarks and Facilities			
1928	Chemical Sites RMP - Lyons Ventures, Incorporated	Town of Glenville	42.8334	-73.9317		Economic	Industrial, Warehousing and Manufacturing			
1020	Bridge - Erie Canal	City of Schenectady	42.8336	-73.9272		Infrastructure Systems	Transportation			
1021	NYS Office for People With Developmental Disabilities - Simmons, Ionada	City of Schenectady	42.8339	-73.9137		Health and Social Services	Disabled	Y		
2309	Electrical Substation - Unknown	Village of Scotia	42.8340	-73.9547		Infrastructure Systems	Power Supply		Y	
1929	Bridge - 50 50 16011007	Village of Scotia	42.8341	-73.9559		Infrastructure Systems	Transportation			
1932	Chemical Sites RMP - 34 Freeman's Bridge Road	Town of Glenville	42.8358	-73.9312		Economic	Industrial, Warehousing and Manufacturing			
1035	Highway Interchange - 686865	Town of Rotterdam	42.8382	-74.0007		Infrastructure Systems	Transportation			
1040	Chemical Sites RMP - Riverside Technology Park	City of Schenectady	42.8385	-73.9193		Economic	Industrial, Warehousing and Manufacturing			
2318	Electrical Substation - Unknown	Town of Glenville	42.8388	-73.9319		Infrastructure Systems	Power Supply		Y	
2319	Schenectady WWTP	City of Schenectady	42.8401	-73.9182		Infrastructure Systems	Wastewater			
1055	Highway Interchange - 30	Town of Rotterdam	42.8414	-74.0043		Infrastructure Systems	Transportation			
1057	Bridge - 890 890 16011101	Town of Rotterdam	42.8416	-74.0044		Infrastructure Systems	Transportation			
1058	Highway Interchange - 58263984	Town of Rotterdam	42.8424	-74.0056		Infrastructure Systems	Transportation			

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1060	Bridge - 5S 5S16041057	Town of Rotterdam	42.8428	-74.0062		Infrastructure Systems	Transportation			
1065	Highway Interchange - 59012280	Town of Rotterdam	42.8451	-74.0097		Infrastructure Systems	Transportation			
1067	Bridge - Ramp To Rte 5S Wb	Town of Rotterdam	42.8453	-74.0065		Infrastructure Systems	Transportation			
1069	Highway Interchange - 1211102	Town of Rotterdam	42.8455	-74.0063		Infrastructure Systems	Transportation			
1072	Bridge - Plotter Kill	Town of Rotterdam	42.8461	-74.0127		Infrastructure Systems	Transportation			
1945	DEC Mine - Cranesville Aggregate Companies Inc	Town of Glenville	42.8463	-73.9887		Infrastructure Systems	Hazardous Materials, Solid Waste, and Recycling			
1073	Bridge - Plotter Kill	Town of Rotterdam	42.8464	-74.0128		Infrastructure Systems	Transportation			
1082	Bridge - Mohawk R/Erie Cnl	Town of Rotterdam	42.8490	-74.0058		Infrastructure Systems	Transportation			
1966	DOH Drinking Water Treatment Plant - Glenville WD #11	Town of Glenville	42.8510	-74.0177		Infrastructure Systems	Water Supply			
1967	Bridge - 890 890 16011108	Town of Glenville	42.8516	-74.0051		Infrastructure Systems	Transportation			
1969	DOH Drinking Water Well - Glenville WD #11	Town of Glenville	42.8526	-74.0179		Infrastructure Systems	Water Supply			
1970	DOH Drinking Water Well - Glenville WD #11	Town of Glenville	42.8526	-74.0174		Infrastructure Systems	Water Supply			
2324	Glenville Wellsá	Town of Glenville	42.8530	-74.0177		Infrastructure Systems	Water Supply			
1973	DEC Mine - Cranesville Aggregate Companies Inc	Town of Glenville	42.8531	-74.0108		Infrastructure Systems	Hazardous Materials, Solid Waste, and Recycling			
1972	DOH Drinking Water Well - Glenville WD #11	Town of Glenville	42.8531	-74.0165		Infrastructure Systems	Water Supply			
1971	DOH Drinking Water Well - Glenville WD #11	Town of Glenville	42.8531	-74.0171		Infrastructure Systems	Water Supply			
1984	Radiological Storage Facility - Roof Scan, Inc.	Town of Glenville	42.8566	-74.0114		Infrastructure Systems	Hazardous Materials, Solid Waste, and Recycling		Y	

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2328	Ellers School (historical)	Town of Rotterdam	42.8579	-74.0268		Health and Social Services	Schools			
1116	Bridge - Mohawk River	Town of Rotterdam	42.8579	-74.0211		Infrastructure Systems	Transportation			
1989	DEC Mine - Larned and Sons Inc	Town of Glenville	42.8588	-74.0187		Infrastructure Systems	Hazardous Materials, Solid Waste, and Recycling			
1120	Chemical Sites RMP - Schenectady International	Town of Rotterdam	42.8604	-74.0240		Economic	Industrial, Warehousing and Manufacturing			
1122	Radiological Storage Facility - Schenectady International, Inc.	Town of Rotterdam	42.8606	-74.0244		Infrastructure Systems	Hazardous Materials, Solid Waste, and Recycling		Y	
1121	Rail Point - Lower Rotterdam Junction	Town of Rotterdam	42.8606	-74.0287		Infrastructure Systems	Transportation			
2329	Power Plant at SI Group	Town of Rotterdam	42.8607	-74.0244		Infrastructure Systems	Power Supply		Y	
2331	Electrical Substation - Unknown	Town of Rotterdam	42.8608	-74.0283		Infrastructure Systems	Power Supply		Y	
2332	Electrical Substation - Unknown	Town of Rotterdam	42.8609	-74.0264		Infrastructure Systems	Power Supply		Y	
1123	EPlan Facility - Resin Plant	Town of Rotterdam	42.8614	-74.0257		Economic	Industrial, Warehousing and Manufacturing			
2333	Schenectady International	Town of Rotterdam	42.8615	-74.0257		Economic	Large Business			
1125	DEC Mine - Bonded Concrete Inc	Town of Rotterdam	42.8619	-74.0332		Infrastructure Systems	Hazardous Materials, Solid Waste, and Recycling			
2334	Mabee House	Town of Rotterdam	42.8655	-74.0320		Natural and Cultural Resources	Historic Landmarks and Facilities			
1992	Mohawk Valley Airpark	Town of Glenville	42.8681	-74.0282		Infrastructure Systems	Transportation			
1138	DOH Drinking Water Well - Rotterdam Wd #3	Town of Rotterdam	42.8690	-74.0365		Infrastructure Systems	Water Supply			
1139	DOH Drinking Water Well - Rotterdam Wd #3	Town of Rotterdam	42.8690	-74.0360		Infrastructure Systems	Water Supply			
1140	Post Office - Rotterdam Junction	Town of Rotterdam	42.8694	-74.0376		Health and Social Services	Government and Administrative Services			

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1993	Bridge - Washout Rd C R 51	Town of Glenville	42.8694	-74.0239		Infrastructure Systems	Transportation			
1141	Fire Resource Vehicles - Rotterdam Junction Fd	Town of Rotterdam	42.8695	-74.0386		Health and Social Services	Emergency Operations / Response			
1996	Bridge - Washout Rd C R 51	Town of Glenville	42.8695	-74.0238		Infrastructure Systems	Transportation			
1144	Rotterdam Junction Fire Station	Town of Rotterdam	42.8695	-74.0386		Health and Social Services	Government and Administrative Services			
1148	DOH Drinking Water Treatment Plant - Rotterdam Wd #3	Town of Rotterdam	42.8704	-74.0376		Infrastructure Systems	Water Supply			
2335	St Margaret of Cortona Church	Town of Rotterdam	42.8705	-74.0395		Natural and Cultural Resources	Cultural or Religious Establishments			
1152	DOH Drinking Water Treatment Plant - Rotterdam Wd #3	Town of Rotterdam	42.8710	-74.0375		Infrastructure Systems	Water Supply			
1999	DEC Mine - Cranesville Aggregate Companies Inc	Town of Glenville	42.8726	-74.0311		Infrastructure Systems	Hazardous Materials, Solid Waste, and Recycling			
2339	BOCES	Town of Rotterdam	42.8738	-74.0442		Health and Social Services	Schools			
1159	EPlan Facility	Town of Rotterdam	42.8744	-74.0467		Economic	Industrial, Warehousing and Manufacturing			
1160	Rail Point - Rotterdam Junction	Town of Rotterdam	42.8745	-74.0465		Infrastructure Systems	Transportation			
1162	Shelter - BOCES	Town of Rotterdam	42.8747	-74.0428		Health and Social Services	Emergency Operations / Response			
1164	EPlan Facility - Rotterdam Salt Shed	Town of Rotterdam	42.8756	-74.0506		Economic	Industrial, Warehousing and Manufacturing			
1172	Bridge - Erie Canal-Lock 9	Town of Rotterdam	42.8775	-74.0427		Infrastructure Systems	Transportation			
2343	Lock E-9 Dam At Rotterdam Jct	Town of Rotterdam	42.8781	-74.0425		Infrastructure Systems	Navigable Waterway Facilities			
1174	Bridge - Mohawk River	Town of Rotterdam	42.8781	-74.0420		Infrastructure Systems	Transportation			
2001	State Owned Property - Lock 9 Barge Canal Park	Town of Glenville	42.8797	-74.0417		Health and Social Services	Government and Administrative Services			

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1180	Bridge - 5S 5S16041014	Town of Rotterdam	42.8832	-74.0661		Infrastructure Systems	Transportation			
1187	Bridge - Erie Canal	Town of Rotterdam	42.8847	-74.0650		Infrastructure Systems	Transportation			
1206	Post Office - Pattersonville	Town of Rotterdam	42.8879	-74.0756		Health and Social Services	Government and Administrative Services			
1210	Bridge - Sandsea Kill	Town of Rotterdam	42.8890	-74.0779		Infrastructure Systems	Transportation			
2782	Mohawk Valley Runway	Town of Glenville				Infrastructure Systems	Transportation			
2775	NY Rail Line	City of Amsterdam, City of Schenectady, Town of Amsterdam, Town of Esperance, Town of Glenville, Town of Rotterdam, Town of Schenectady, Town of Schoharie, Village of Fort Johnson, Village of Scotia, Village of Waterford				Infrastructure Systems	Transportation			
2777	Interstate and Major Highways	City of Amsterdam, City of Schenectady, Town of Florida, Town of Rotterdam, Town of Schenectady				Infrastructure Systems	Transportation			

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2778	DEC Rivers and Streams	Statewide				Natural and Cultural Resources	Water Bodies			
2779	Conduit	City of Amsterdam, City of Schenectady, Town of Florida, Town of Rotterdam				Infrastructure Systems	Telecommunications			
2781	Amtrak Line	City of Amsterdam, City of Schenectady, Town of Amsterdam, Town of Glenville, Town of Rotterdam				Infrastructure Systems	Transportation			
2784	Transmission Line - Niagara Mohawk	City of Amsterdam, City of Schenectady, Town of Amsterdam, Town of Florida, Town of Glenville, Town of Rotterdam, Village of Scotia				Infrastructure Systems	Power Supply			
2785	Pipeline – CNG Transmission Corp	Town of Florida, Town of Rotterdam				Infrastructure Systems	Liquid Fuels			

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2789	Thruway Fiber Optic Network	Town of Florida, City of Amsterdam, Town of Rotterdam				Infrastructure Systems	Telecommunications			
2790	TV Station Broadcast Range	Statewide				Infrastructure Systems	Telecommunications			
2793	SEMO Region	Statewide				Health and Social Services	Emergency Operations / Response			
2794	NYS Police Troop Boundary	Statewide				Health and Social Services	Emergency Operations / Response			
2795	Government Building	City of Schenectady				Health and Social Services	Government and Administrative Services			
2800	NY Fire Response Water Region	Statewide				Health and Social Services	Emergency Operations / Response			
2801	Fire District	Statewide				Health and Social Services	Emergency Operations / Response			
2802	Population Night	Statewide				Health and Social Services	Emergency Operations / Response			
2803	Population Daytime	Statewide				Health and Social Services	Emergency Operations / Response			
2804	FM Broadcast Range	Statewide				Infrastructure Systems	Telecommunications			
2805	Cell Phone Market Area	Statewide				Infrastructure Systems	Telecommunications			
2806	Flood Zones - 100 and 500 year	Statewide				Health and Social Services	Emergency Operations / Response			
2807	DEC Wetland	Statewide				Natural and Cultural Resources	Wetlands and Marshes			
2808	DEC Wetland	Statewide				Natural and Cultural Resources	Wetlands and Marshes			

Appendix D: Draft Prioritized List of Projects

**Town of Rotterdam
NY Rising Project Priority List**

Priority: Time Frame:
 High (H) Short (S)- 1 to 2 Years
 Medium (M) Medium (M)- 2 to 5 Years
 Low (L) Long (L)(S, M, L)- 5+ Years

Acronyms:

LTCR PLAN – Long-Term Community Recovery Plan – Sept. 2013 – John M. McDonald Engineering, P.C.

HMPG PROJECT – Hazard Mitigation Plan Grant Project – August 2013 – LaBerge Group Engineering
 BOA – Brownfield Opportunity Area – February 2013 – LaBerge Group Engineering

Priority	Project	Project Description
H/S	Drainage	Remove the pumps on Lock Street and replace them with a gravity drainage line that runs from Lock Street to Scrafford Lane to help eliminate flooding on Lock Street. The correction work would include the installation of catch basins, piping, pretreatment system and a culvert under the railroad track to drain the water into the upland area above and west end of the gravel pit. (LTCR PLAN – PG.14)
H/S	Drainage	Reestablish a canal channel by removing sediment and debris from approximately 800 linear feet of canal to establish a narrow meandering channel to help standing water in the canal make its way to the river. (LTCR PLAN – PG.10)
H/S	Drainage	Replace two culverts at the railroad crossing at Scrafford Lane. Ensure the proper size and elevation of each culvert. Replace the culvert at Mabie Lane. (LTCR PLAN- PG.12)
H/S	Drainage	There are many unmaintained culverts in the drainage area in and around the old Erie Canal that caused severe drainage problems during the Irene event. Determine ownership via records, survey and tax map review. Establish easements for maintenance and repair access and establish maintenance schedule. (LTCR Plan- PG.16)
H/S	Drainage/Bike Trail Tunnel	A grade separated tunnel is proposed as the best option to allow railroad and bike trail traffic at Scrafford Lane. A drainage component could also be engineered into this tunnel project. (Erie Canalway Trail Roundtable Discussion – Office of Congressman Paul Tonko – NY-20, LTCR PLAN, BOA)
H/S	Firehouse Upgrade	Install a generator at the Rotterdam Junction Fire District #1 Station to provide electricity to this facility in the event of a power outage. Additional disaster equipment is necessary to provide essential utilities and shelter for those in need. Handicap accessibility should also be added to this upgrade. (LTCR PLAN – PG.25 and HMPG PROJECT)
H/S	Sanitary Lift Stations	Install a permanent back-up generator at each of the five critical lift stations and purchase five portable generators. (HMPG PROJECT)
H/S	District #3 Well	Install an automatic transfer switch at the Rotterdam Junction - District #3 well heads facility located on Main St. (Rt. 5S) to automatically start the generator in the event of a power outage to this facility.
M/M	Housing Buy-	Purchase homes located in Rotterdam Junction from homeowners not

Priority	Project	Project Description
	Back	rebuilding or returning to their homes. Purchase demolished or sold homes for reoccupation and tax rolls.
M/M	Flood Protection	Provide a berm around the District #1 Rotterdam Junction Well Facility and provide sump pumps to remove precipitation and/or water that leaks onto the site. (HMPG PROJECT)
M/M	District #5 Well	Drill a new well at the Rotterdam Water District #5 facility located on River Road. Include a flood containment berm around the proposed new well located in the flood plain along the Mohawk River.
M/M	Highway Construction	Establish redundant evacuation routes. Investigate the possibility of raising the grade on Route 5S at the southeasterly end of the hamlet where flooding occurs (near the intersection of the bike path). (LTCR PLAN – PG.20)
M/M	Streetscape Improvements	A streetscape project should address poor sidewalk conditions, consolidation and elimination of curb cuts, street trees, pedestrian benches, and decorative lighting. Traffic calming measures should also be implemented. (LTCR PLAN – PG. 32 and BOA- PG. 22-26)
M/M	High Capacity Pumps	Purchase six high capacity diesel pumps, two of which will be trailer mounted for use by DPW to deploy to critical affected areas. (HMPG PROJECT)
L/L	Senior Center	Install a generator at the Rotterdam Senior Center to provide electricity in the event of a power outage. This facility was used as an emergency shelter and meal site during the previous flood emergency. (HMPG PROJECT)
L/L	Community Project	Purchase the Bobby Young’s Garage property located in Rotterdam Junction. This would provide protection for the two Rotterdam Junction well heads that are located directly behind the Young property.
L/L	Infrastructure Water Lines	Investigate re-installing connection valves between the Town of Rotterdam main water lines and the City of Schenectady main water lines to provide for interconnection of water between the two municipalities if one of these municipalities require water supply during an emergency.
L/L	Evacuation Plan	Work with Schenectady County to refine and improve the existing emergency response and evacuation plan to address lessons learned during the Hurricane Irene and Tropical Storm Lee. (LTCR PLAN –PG.18)
L/L	Overlook Project	Encourage tourism and highlight the Town’s history and heritage by cleaning up and revitalizing the old Erie Canal Lock #25. An interpretative overlook should be created to provide for scenic views and a historical perspective of the lock. This could be incorporated into our high priority list.
L/L	River Waterfront Access	Coordinate construction with the NYS Canal Corporation to provide trail heads and access points to the Mohawk River. (LTCR PLAN – PG. 34 and BOA – PG. 116)
L/L	Training	Provide training to all code enforcement personnel and other appropriate Town personnel. (HMPG PROJECT)
L/L	Infrastructure Water Lines	Establish a connection between the Rotterdam Junction District #3 wells with the wells the at SI Group facility. Establish a connection between the Rotterdam District #5 wells on Rice Road and the SI Group and the District #3 well facility.